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SECRETARY FOR  
ENVIRONMENTAL PROTECTION

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**Central Valley Regional Water Quality Control Board**

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**CLEAN WATER ACT SECTION 401 WATER QUALITY CERTIFICATION AND ORDER**

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**Effective Date:** 5 July 2017

**Expiration Date:** 5 July 2022

**Program Type:** Fill/Excavation

**Project Type:** Channel Construction and Maintenance

**Project:** North Sacramento Streams Levee Accreditation Project (Project)

**Applicant:** Sacramento Area Flood Control Agency

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If you have any questions, please call Central Valley Regional Water Quality Control Board (Central Valley Water Board) Staff listed above or (530) 224-4845 and ask to speak with the Water Quality Certification Unit Supervisor.

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**I. Order**

This Clean Water Act (CWA) section 401 Water Quality Certification action and Order (Order) is issued at the request of Sacramento Area Flood Control Agency (herein after Permittee) for the Project. This Order is for the purpose described in application and supplemental information submitted by the Permittee. The application was received on 22 July 2016. The application was deemed complete on 23 September 2016.

**II. Public Notice**

The Central Valley Water Board provided public notice of the application pursuant to California Code of Regulations, title 23, section 3858 from 29 July 2016 to 19 August 2016. The Central Valley Water Board did not receive any comments during the comment period.

**III. Project Purpose**

The Sacramento Area Flood Control Agency (SAFCA) proposes to reduce the risk of flooding in the City of Sacramento and surrounding areas through the construction of the North Sacramento Streams Levee Accreditation Project. The proposed project would reduce flood risk and bring the flood system of levees located within the project site into compliance with applicable engineering standards established under the National Flood Insurance Program (NFIP).

**IV. Project Description**

The proposed project is limited to the installation of seepage remediation features to meet embankment and foundation stability requirements; and the removal of high hazard encroachments and vegetation along the Natomas East Main Drainage Canal (NEMDC)/Steelhead Creek and Arcade Creek.

Approximately 0.5 acres of waterside riparian tree canopy will be permanently removed and approximately 7,600 tons of rock slope protection will be installed. Six temporary bridges will be installed to facilitate haul route access. All of the bridges will be temporary clear span bridges across NEMDC/Steelhead Creek and Arcade Creek with abutments placed outside of the creek channel. Temporary ramps on the waterside levee slopes and temporary clear-span bridges will be removed prior to November 1. Gravel on levee crowns along haul routes will be maintained as needed during periods of hauling, including watering for dust control and periodic grading to control rutting. Borrow material will be obtained from a borrow site located south of Elkhorn Boulevard at Sorrento Road. The borrow site will be restored and enhanced once borrow materials are excavated.

The proposed levee improvements will occur in seven levee reaches, one along the east side of NEMDC/Steelhead Creek and three along each side of Arcade Creek. The levee improvement sites are designated as follows: NEMDC-EL, Arcade Creek South (ARS) 1, ARS-3, ARS-4, Arcade Creek North (ARN) 1, ARN-3, and ARN-4. Each reach is described below.

- NEMDC-EL – Approximately 2,500 feet in length of the NEMDC/Steelhead Creek East Levee along the southeastern boundary of the Natomas Basin, south of the confluence with Arcade Creek.
- ARS-1 – Approximately 1,250 feet in length along the Arcade Creek South Levee.
- ARS-3 – Approximately 3,820 feet in length along the Arcade Creek South Levee.
- ARS-4 – Approximately 1,880 feet in length along the Arcade Creek South Levee.
- ARN-1 – Approximately 1,000 feet in length along the Arcade Creek North Levee.

- ARN-3 – Approximately 3,300 feet in length along the Arcade Creek North Levee.
- ARN-4 – Approximately 4,000 feet in length along the Arcade Creek North Levee.

The only reach for the project along the NEMDC East Levee is located along the southeastern boundary of the Natomas Basin, just south of the confluence with Arcade Creek. A soil-cement-bentonite (SCB) or soil-cement-cement-bentonite (SCCB) slurry cutoff wall will be constructed at the waterside toe of the levee to remediate underseepage. Rock slope protection will be placed over the length of the waterside cutoff wall, but will not encroach within waters. Soil will be placed over the rock slope protection and the area will be seeded with native herbaceous species.

For Reach 1 and Reach 3 of the Arcade Creek South (ARS) Levee, a soil-bentonite (SB) slurry cutoff wall will be constructed at the centerline of the levee to remediate under-seepage and stability.

Reach 4 of the ARS Levee is located between Rio Linda Boulevard and Marysville Boulevard. A SCB or SCCB slurry cutoff wall will be constructed at the waterside toe of the levee to remediate through-seepage, under-seepage, and stability. Erosion protection will be placed over the length of the waterside cutoff wall, but will not encroach within waters. Soil will be placed over the rock slope protection and the area will be seeded with native herbaceous species.

Reach 1 of the Arcade Creek North (ARN) Levee is about 1,000 feet long. A concrete-lined ditch owned by the City of Sacramento at Drainage Pumping Plant No. 158 is located approximately 30 feet from the landside levee toe. This concrete-lined toe ditch descends into the pump station sump. This reach includes the lined channel and the concrete paved pump station sump area.

A total of 13 relief wells will be constructed at the City of Sacramento Sump 158 in front of the pump station, and will address the underseepage deficiency associated with the levee. The wells will be installed within the existing cement-lined collector ditch located near the sump on the landside of the levee at regular intervals for approximately 900 feet within the concrete lined drainage channel. Wells will extend to 20 feet below mean sea level.

For Reach 3 of the Arcade Creek North Levee a SB slurry cutoff wall totaling approximately 3,300 linear feet will be constructed at the centerline of the levee to remediate under-seepage and stability.

For Reach 4 of the Arcade Creek North Levee, a waterside cutoff wall totaling approximately 3,925 linear feet will be constructed. Erosion protection will be placed over the entire length of cutoff wall. Soil will be placed over the rock slope protection and the area will be seeded with native herbaceous species.

#### **Borrow Site, Staging Area and Haul Routes:**

A borrow site will provide up to 27,000 cubic yards of suitable material for levee improvements for the project. The borrow site is located south of Elkhorn Boulevard at Sorrento Road. The borrow site is located close to the NEMDC/Steelhead Creek Levee. From the borrow site, haul trucks will travel north on Sorrento Road to Elkhorn Boulevard, cross NEMDC/Steelhead Creek using the bridge at Elkhorn Boulevard, before turning south on East Levee Road. Alternatively, trucks will travel to the southern end of the borrow site along Sorrento Road, across a clear-span temporary bridge over NEMDC/Steelhead Creek, and proceed up a sloping ramp to East Levee Road. Trucks will continue on East Levee Road for approximately 1 mile. Immediately south of the Reclamation District 1000 pumping plant, trucks will use the

levee ramp and continue along the waterside toe of the NEMDC/Steelhead Creek East Levee using an existing unimproved levee inspection road for approximately 0.5 mile.

Organic stripping waste will be temporarily stockpiled on-site where area permits, or in staging areas. After levee reconstruction, suitable organic stripping material will be spread on reconstructed levee slopes and over other disturbed work areas. Any remaining surplus organic stripping material will be hauled to the borrow site for disposal. At the borrow site, this material will be added to stockpiled borrow area stripping material and used for post-borrow site reconstruction. Any material remaining after borrow area reconstruction will be disposed of off-site.

Surplus material that may be potentially hazardous if placed in riparian areas (e.g. asphalt) or not suitable for disposal on-site or in the borrow areas will be disposed of by the Permittee or its contractor(s) at construction material recyclers or in suitable licensed landfills with appropriate capacity to accept the material.

### **Details of the proposed improvements and construction:**

#### **Cutoff Walls**

Two types of cutoff walls will be used for the various levee reaches. These consist of SB slurry cutoff walls constructed along the existing centerline of the levee and SB or SCCB slurry cutoff walls constructed along the existing waterside toe of the levee. Both types of remediation are described in the following paragraphs.

*Centerline Slurry Cutoff Wall Construction:* Construction of the centerline slurry cutoff walls to depths ranging from 30-60 feet along the existing levee will be accomplished primarily with medium- to large-size excavators depending on required wall depth. This equipment and the associated sequence of excavation, backfill preparation, and placement of backfill back into the slurry cutoff wall trench will require a work surface along the trench. This work surface of 30 to 40 feet will be provided by excavating (degrading) the existing levee crown. For all slurry wall construction techniques under consideration, except One Pass Trench (OPT) techniques, the amount of degrade will typically be 1/3 the total height of the levee as measured on the landside. For the OPT method, the working surface need only be approximately 20 to 25 feet, which will allow degrading less than 1/3 the levee height in some areas as long as cracking of levee soils is not a concern. Prior to degrading the levee, grass will be stripped from levee slopes and gravel on the crown will be salvaged and stockpiled in staging areas.

Excavated soils will be moved to staging areas. There, it will be blended with other excavated soils or with imported clay soils from borrow areas as needed to make it suitable for reuse. It is estimated that the amount of borrow to be mixed with excavated soils will be approximately 10 percent of the excavated volume. At times during construction, it may be necessary to temporarily stockpile surplus material on the waterside slope of the levee to efficiently balance the excavation and hauling operations.

After the working surface has been excavated and prepared, the slurry cutoff wall will be excavated to the required depths for each levee reach. For SB walls, approximately 70 percent of the excavated material will be salvaged and reused in cutoff wall construction by mixing with the bentonite. The remaining 30 percent of unusable material from SB trench excavation will be blended with borrow to make it suitable for reuse in levee reconstruction or it will be spoiled if unsuitable for reuse.

After installation of the cutoff wall, embankment materials will be placed and compacted to restore the levee height and crown. Embankment material must meet the requirements of the

specifications for levee fill. Each lift will be moisture-conditioned and compacted to the specified density using suitable tamping foot compactors.

The levee regrade and crown reconstruction will either include a zoned fill with low permeability core and suitable shell material, or a homogeneous section of suitable low permeability material. The configuration will be determined during final design. After the levee is reconstructed, aggregate base or asphalt concrete will be placed on the levee crown patrol road to match preconstruction conditions, and the levee slopes would be seeded and/or planted with approved vegetation. Currently, no asphalt concrete paving of levee crowns is envisioned except for localized areas where reconstruction of short paved ramps from the levee crown to a major road crossing will be needed.

The centerline cutoff walls must be continuous across several major road crossings on Arcade Creek North and South Levees. The cutoff walls will also be constructed in areas where large underground utilities are currently present (for example at pump stations). It may be possible for the construction contractor to expose utilities and work around them while building the cutoff wall. However, it is also possible that the sizes and depths of some of the utilities may preclude working around them. At such locations, and at major road crossings, it may be necessary to leave gaps in the cutoff wall. It is anticipated that these gaps would be closed using SCCB panel sections placed to levels under the exposed utilities and the road pavement section. Controlled low strength material will be placed over the wall to encase and support the utilities and complete backfilling the trench to a point approximately 3 feet below the levee crown or completed road surface. Backfill above the controlled low strength material will be approved levee fill, or road pavement section under the road crossings. Closure panels will overlap the adjacent slurry cutoff walls by a minimum of 25 feet. Actual details for handling road crossings, gravity storm drain pipelines and major pump station pipe utilities will be finalized as part of final project design.

*Toe Slurry Cutoff Wall Construction:* Construction of the toe SCCB slurry cutoff walls to depths ranging from 15-30 feet along the existing waterside levee toe will require small to medium-size excavators. Constructing of a work bench along the toe will be needed. The bench elevation will be based on existing topography, required working room for cutoff wall installation, optimizing earthwork, and minimizing the need for bench elevation changes along the levee that could complicate slurry wall construction.

Excavations for the bench will extend deep enough below existing grade to remove organic material and soft, unsuitable foundation soils. Some dewatering and groundwater control may be needed. Bench excavation will also extend into the existing waterside slope of the levee as needed to ensure that new selected bench fill material is integrated effectively with the existing material on the levee slope. Excavated nonorganic soil suitable for reuse will be processed and used for reconstruction to minimize off-hauling materials. Some levee reaches with toe cutoff walls will require a more substantial excavation and reconstruction. The bench fill material will be integrated with the slope reconstruction fill.

After the foundation has been excavated and accepted, embankment materials will be placed in accordance with accepted levee construction standards and compacted to create the bench working surface for slurry wall construction. Each lift will be moisture conditioned and compacted to the specified density using suitable tamping foot compactors.

After backfilling to the working surface for cutoff wall construction, the SB or SCCB wall will be installed. Approximately 50 percent of the material from the trench will be salvaged and processed with other excavated soil or borrow material for reuse in levee reconstruction. The remaining material from the trench excavation unsuitable for reuse will be disposed of as described previously.

After installation of the cutoff wall, embankment materials will be placed to complete the bench construction to a minimum height of approximately 3 feet over the top of the cutoff wall and complete reconstruction of cuts on the waterside slope. Embankment material will be blended and processed material suitable for reuse. Each lift will be moisture-conditioned and compacted to the specified density using suitable tamping foot compactors.

After the bench is completed, the top and waterside slope will be covered with rock slope protection to control erosion. Above the bench, all disturbed construction areas will be revegetated. Gravel surfacing on the levee crown will be supplemented or replaced within the levee repair limits wherever damaged by haul vehicles and other construction-related traffic.

*Sheet Pile Cutoff Walls:* Sheet pile cutoff walls will be installed with a crane and hydraulic ram that hammers or pushes the sheet pile into the ground to the desired depth. Any asphalt concrete surfacing will be removed prior to sheet pile placement. No levee degradation is needed except to develop an access platform for the crane of sufficient width. A 3-foot-wide by 3-foot-deep trench will be excavated along the sheet pile alignment. The sheet piling would be driven in the trench. The trench will then be backfilled with suitable levee fill materials placed on both sides and over the top of the completed wall. After backfilling the trench the existing asphalt-concrete pavement will be reconstructed.

The waterside toe repair on NEMDC/Steelhead Creek will continue north to the confluence with Arcade Creek, turn east up Arcade Creek, and pass under the existing UPRR railroad trestle. A short section of sheet pile wall will also be required at the end of the NEMDC/Steelhead Creek toe repair upstream of the trestle and the centerline slurry cutoff wall on Arcade Creek South Levee. The wall will be installed up the levee waterside slope with a crane and hydraulic ram that pushes the sheet pile into the ground to the desired depth on the levee slope. The top of the pile will be cut just below grade on the slope to conform to the slope and avoid any flow restrictions or safety hazards.

#### **Erosion Protection**

Erosion protection includes placement of rip rap on waterside benches where waterside toe slurry walls are constructed. Following construction, levee slopes and other areas disturbed by construction will be revegetated and brought back to pre-project conditions.

#### **V. Project Location**

Address: The project is located on NEMDC/Steelhead Creek, Arcade Creek, and Robla Creek.

County: Sacramento County

Assessor's Parcel Numbers:

263-0260-007, 263-0010-037, 263-0010-006, 263-0010-009, 263-0010-014, 263-0010-016, 263-0260-010, 251-0291-011, 251-0292-009, 251-0301-010, 251-0311-033, 263-0010-034, 263-0010-130, 263-0010-015, 263-0010-008, 263-0010-013, 263-0010-015, 263-0260-010, 251-0291-018, 251-0292-008, 251-0301-028, 251-0301-038, 251-0311-034, 251-0311-007, 251-0260-006, 201-0100-012, 226-0061-002, 226-0061-031, 226-0061-027

Nearest City: Sacramento

Sections 2, 3, and 12, Township 9 North, Range 5 East, MDB&M.

Sections 6, 7, 18, and 31, Township 10 North, Range 4 East, MDB&M.

Latitude: 38.620°N and Longitude: -121.468°W

Maps showing the Project location are found in Attachment A of this Order.

## VI. Project Impact and Receiving Waters Information

The Project is located within the jurisdiction of the Central Valley Water Board. Receiving waters and groundwater potentially impacted by this Project are protected in accordance with the Water Quality Control Plan for the Sacramento River and San Joaquin River Basins, Fourth Edition, revised April 2016 (Basin Plan). The plan for the region and other plans and policies may be accessed online at: [http://www.waterboards.ca.gov/plans\\_policies/](http://www.waterboards.ca.gov/plans_policies/). The Basin Plan includes water quality standards, which consist of existing and potential beneficial uses of waters of the state, water quality objectives to protect those uses, and the state and federal antidegradation policies.

It is the policy of the State of California that every human being has the right to safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes. This Order promotes that policy by requiring discharges to meet maximum contaminant levels designed to protect human health and ensure that water is safe for domestic use.

Project impact and receiving waters information can be found in Attachment B. Table 1 of Attachment B shows the receiving waters and beneficial uses of waters of the state impacted by the Project. Individual impact location and quantity is shown in Table 2 of Attachment B.

## VII. Description of Direct Impacts to Waters of the State

Impacts would primarily be a result of activities to facilitate construction access. These activities include minor grading and leveling of access roads for construction access. The wetlands shown in Table 1 are seasonal wetlands that occur within the haul route alignment. Rather than discharging fill or dredged materials into these wetlands, the haul roads would be graded to ensure a level surface and then used for equipment traffic. Since these are temporary impacts, it is expected that the jurisdictional areas will be returned to as close to pre-construction conditions as possible, once construction is complete.

Total Project fill/excavation quantities for all impacts are summarized in Table 1. Permanent impacts are categorized as those resulting in a physical loss in area and also those degrading ecological condition only.

**Table 1: Total Project Fill/Excavation Quantity**

Aquatic Resource Type	Temporary Impact <sup>1</sup>			Permanent Impact					
				Physical Loss of Area			Degradation of Ecological Condition Only		
	Acres	Cu.Yds	LF	Acres	CY	LF	Acres	Ton	LF
Riparian Zone							0.5	7,600	
Stream Channel	2.90		4,009						
Wetland	0.68	27,000							

<sup>1</sup> Includes only temporary direct impacts to waters of the state and does not include upland areas of temporary disturbance which could result in a discharge to waters of the state.



**VIII. Avoidance and Minimization**

- a. A Storm Water Pollution Prevention Plan (SWPPP) that identifies specific best management practices to avoid, reduce, and minimize impacts on water quality during construction activities shall be prepared and implemented for each construction contract.
- b. Erosion control measures that minimize soil or sediment from entering waterways and wetlands shall be installed, monitored for effectiveness, and maintained throughout construction operations.
- c. Precautions to minimize turbidity/siltation shall be implemented during construction. This may require placing barriers (e.g., silt curtains) to prevent silt and/or other deleterious materials from entering downstream reaches.
- d. A written Spill Prevention and Control Plan (SPCP) shall be prepared and implemented. The SPCP and all material necessary for its implementation shall be accessible on-site prior to initiation of project construction and throughout the construction period. The SPCP shall include a plan for the emergency cleanup of any spills of fuel or other material. Employees/construction workers shall be provided the necessary information from the SPCP to prevent or reduce the discharge of pollutants from construction activities to waters and to use the appropriate measures should a spill occur. In the event of a spill, work shall stop immediately and the California Department of Fish and Wildlife (CDFW), U.S. Fish and Wildlife (USFWS), National Marine Fisheries Service (NMFS), Central Valley Regional Water Quality Control Board (RWQCB), and U.S. Army Corps of Engineers (USACE) shall be notified within 24 hours.

**IX. Compensatory Mitigation**

The Permittee has agreed to provide compensatory mitigation for direct impacts described in section VII for permanent impacts.

**X. California Environmental Quality Act (CEQA)**

On 21 July 2016, the Sacramento Area Flood Control Agency, as lead agency, certified an Environmental Impact Report (EIR) (State Clearinghouse (SCH) No. 2014052038) for the Project and filed a Notice of Determination (NOD) at the SCH on 22 July 2016. Pursuant to CEQA, the Central Valley Water Board has made Findings of Facts (Findings) which support the issuance of this Order and are included in Attachment C.

**XI. Petitions for Reconsideration**

Any person aggrieved by this action may petition the State Water Resources Control Board to reconsider this Order in accordance with California Code of Regulations, Title 23, section 3867. A petition for reconsideration must be submitted in writing and received within 30 calendar days of the issuance of this Order.

**XII. Fees Received**

An application fee of \$600.00 was received on 25 July 2016. The fee amount was determined as required by California Code of Regulations, Title 23, sections 3833(b)(3) and 2200(a)(3), and was calculated as Category A - Fill & Excavation Discharges (fee code 84) with the dredge and fill fee calculator.

An additional fee of \$53,522.00 based on total Project impacts was received on 12 December 2016.

**XIII. Conditions**

The Central Valley Water Board has independently reviewed the record of the Project to analyze impacts to water quality and designated beneficial uses within the watershed of the Project. In accordance with this Order, the Permittee may proceed with the Project under the following terms and conditions:

**A. Authorization**

Impacts to waters of the state shall not exceed quantities shown in Table 1.

**B. Reporting and Notification Requirements**

The following section details the reporting and notification types and timing of submittals. Requirements for the content of these reporting and notification types are detailed in Attachment D, including specifications for photo and map documentation during the Project. Written reports and notifications must be submitted using the Reporting and Notification Cover Sheet located in Attachment D, which must be signed by the Permittee or an authorized representative.

The Permittee must submit all notifications, submissions, materials, data, correspondence, and reports in a searchable Portable Document Format (PDF). Documents less than 50 MB must be emailed to: [centralvalleyredding@waterboards.ca.gov](mailto:centralvalleyredding@waterboards.ca.gov).

In the subject line of the email, include the Central Valley Water Board Contact, Project name, and WDID. Documents that are 50 MB or larger must be transferred to a disk and mailed to the Central Valley Water Board Contact.

**1. Project Reporting**

- a. **Annual Reporting:** The Permittee shall submit an Annual Report each year on the 1st day of the month one year after the effective date of the Certification. Annual reporting shall continue until a Notice of Project Complete Letter is issued to the Permittee.

**2. Project Status Notifications**

- a. **Commencement of Construction:** The Permittee shall submit a Commencement of Construction Report at least seven (7) days prior to start of initial ground disturbance activities and corresponding Waste Discharge Identification Number (WDID#) issued under the NPDES General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Order No. 2009-0009-DWQ; NPDES No. CAS000002).
- b. **Request for Notice of Completion of Discharges Letter:** The Permittee shall submit a Request for Notice of Completion of Discharges Letter following completion of active Project construction activities, including any required restoration and permittee-responsible mitigation. This request shall be submitted to the Central Valley Water Board staff within thirty (30) days following completion of all Project construction activities. Upon acceptance of the request, Central Valley Water Board staff shall issue a Notice of Completion of Discharges Letter to the Permittee which will end the active discharge period and associated annual fees.
- c. **Request for Notice of Project Complete Letter:** The Permittee shall submit a Request for Notice of Project Complete Letter when construction and/or any post-

construction monitoring is complete,<sup>2</sup> and no further Project activities will occur. This request shall be submitted to Central Valley Water Board staff within thirty (30) days following completion of all Project activities. Upon approval of the request, the Central Valley Water Board staff shall issue a Notice of Project Complete Letter to the Permittee which will end the post discharge monitoring period and associated annual fees.

**3. Conditional Notifications and Reports:** The following notifications and reports are required as appropriate.

**a. Accidental Discharges of Hazardous Materials<sup>3</sup>**

Following an accidental discharge of a reportable quantity of a hazardous material, sewage, or an unknown material, the following applies (Water Code, Section 13271):

- i. As soon as (A) Permittee has knowledge of the discharge or noncompliance, (B) notification is possible, and (C) notification can be provided without substantially impeding cleanup or other emergency measures then:

- first call – 911 (to notify local response agency)
- then call – Office of Emergency Services (OES) State Warning Center at: (800) 852-7550 or (916) 845-8911
- Lastly follow the required OES procedures as set forth in:  
[http://www.caloes.ca.gov/FireRescueSite/Documents/CalOES-Spill\\_Booklet\\_Feb2014\\_FINAL\\_BW\\_Acc.pdf](http://www.caloes.ca.gov/FireRescueSite/Documents/CalOES-Spill_Booklet_Feb2014_FINAL_BW_Acc.pdf)

- ii. Following notification to OES, the Permittee shall notify Central Valley Water Board, as soon as practicable (ideally within 24 hours). Notification may be delivered via written notice, email, or other verifiable means in accordance with section XIII.B.

- iii. Within five (5) working days of notification to the Central Valley Water Board, the Permittee must submit an Accidental Discharge of Hazardous Material Report.

**b. Violation of Compliance with Water Quality Standards:** The Permittee shall notify the Central Valley Water Board of any event causing a violation of compliance with water quality standards. Notification may be delivered via written notice, email, or other verifiable means in accordance with section XIII.B.

- i. This notification must be followed within three (3) working days by submission of a Violation of Compliance with Water Quality Standards Report.

**c. In-Water Work and Diversions:**

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<sup>2</sup> Completion of post-construction monitoring shall be determined by Central Valley Water Board staff and shall be contingent on successful attainment of restoration and mitigation performance criteria.

<sup>3</sup> "Hazardous material" means any material that, because of its quantity, concentration, or physical or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment if released into the workplace or the environment. "Hazardous materials" include, but are not limited to, hazardous substances, hazardous waste, and any material that a handler or the administering agency has a reasonable basis for believing that it would be injurious to the health and safety of persons or harmful to the environment if released into the workplace or the environment. (Health & Safety Code, Section 25501.)

- i. The Permittee shall notify the Central Valley Water Board at least forty-eight (48) hours prior to initiating work in water or stream diversions. Notification may be delivered via written notice, email, or other verifiable means in accordance with section XIII.B.
  - ii. Within three (3) working days following completion of work in water or stream diversions, an In-Water Work/Diversions Water Quality Monitoring Report must be submitted to Central Valley Water Board staff.
- d. **Modifications to Project:** Project modifications may require an amendment of this Order. The Permittee shall give advance notice to Central Valley Water Board staff if Project implementation as described in the application materials is altered in any way or by the imposition of subsequent permit conditions by any local, state or federal regulatory authority by submitting a Modifications to Project Report. The Permittee shall inform Central Valley Water Board staff of any Project modifications that will interfere with the Permittee's compliance with this Order. Notification may be made in accordance with conditions in the certification deviation section of this Order.
- e. **Transfer of Property Ownership:** This Order is not transferable in its entirety or in part to any person or organization except after notice to the Central Valley Water Board in accordance with the following terms:
  - i. The Permittee must notify the Central Valley Water Board of any change in ownership or interest in ownership of the Project area by submitting a Transfer of Property Ownership Report. The Permittee and purchaser must sign and date the notification and provide such notification to the Central Valley Water Board at least 10 days prior to the transfer of ownership. The purchaser must also submit a written request to the Central Valley Water Board to be named as the permittee in a revised order.
  - ii. Until such time as this Order has been modified to name the purchaser as the permittee, the Permittee shall continue to be responsible for all requirements set forth in this Order.
- f. **Transfer of Long-Term BMP Maintenance:** If maintenance responsibility for post-construction BMPs is legally transferred, the Permittee must submit to the Central Valley Water Board a copy of such documentation and must provide the transferee with a copy of a long-term BMP maintenance plan that complies with manufacturer or designer specifications. The Permittee must provide such notification to the Central Valley Water Board with a Transfer of Long-Term BMP Maintenance Report at least 10 days prior to the transfer of BMP maintenance responsibility.

### C. Water Quality Monitoring

- 1. **General:** Continuous visual surface water monitoring shall be conducted during active construction periods to detect accidental discharge of construction related pollutants (e.g. oil and grease, turbidity plume, or uncured concrete). The Permittee shall perform surface water sampling:
  - a. when performing any in-water work;
  - b. during the entire duration of temporary surface water diversions;

- c. in the event that the Project activities result in any materials reaching surface waters; or
  - d. when any activities result in the creation of a visible plume in surface waters.
2. **Accidental Discharges/Noncompliance:** Upon occurrence of an accidental discharge of hazardous materials or a violation of compliance with a water quality standard, Central Valley Water Board staff may require water quality monitoring based on the discharge constituents and/or related water quality objectives and beneficial uses.

3. **In-Water Work or Diversions:**

During planned in-water work or during the entire duration of temporary water diversions, any discharge(s) to waters of the state shall conform to the following water quality standards:

- a. Waters shall not contain oils, greases, waxes, or other materials in concentrations that cause nuisance, result in a visible film or coating on the surface of the water or on objects in the water, or otherwise adversely affect beneficial uses.
- b. Activities shall not cause turbidity increases in surface water to exceed:
  - i. where natural turbidity is less than 1 Nephelometric Turbidity Units (NTUs), controllable factors shall not cause downstream turbidity to exceed 2 NTU;
  - ii. where natural turbidity is between 1 and 5 NTUs, increases shall not exceed 1 NTU;
  - iii. where natural turbidity is between 5 and 50 NTUs, increases shall not exceed 20 percent;
  - iv. where natural turbidity is between 50 and 100 NTUs, increases shall not exceed 10 NTUs;
  - v. where natural turbidity is greater than 100 NTUs, increases shall not exceed 10 percent.

In determining compliance with the above limits, appropriate averaging periods may be applied provided that beneficial uses will be fully protected. Averaging periods may only be used with prior permission of the Central Valley Water Board Executive Officer.

- c. Activities shall not cause settleable matter to exceed 0.1 mL/L in surface waters as measured in surface waters within approximately 300 feet downstream of the Project.

Sampling during in-water work or during the entire duration of temporary water diversions shall be conducted in accordance with Table 2 sampling parameters.<sup>4</sup> The sampling requirements in Table 2 shall be conducted upstream out of the influence of the Project, and approximately 300 feet downstream of the work area.

The sampling frequency may be modified for certain projects with written approval from Central Valley Water Board staff. A surface water monitoring report, as described in Attachment D, shall be submitted within two weeks on initiation of in-water construction, and every two weeks thereafter. In reporting the data, the Permittee shall arrange the data in tabular form so that the sampling locations, date, constituents, and concentrations are readily discernible. The data shall be summarized in such a manner to illustrate clearly whether the Project complies with Order requirements. The report shall include surface water sampling results, visual observations, and identification of the turbidity increase in the receiving water applicable to the natural turbidity conditions specified in the turbidity criteria in XIII.C.3.b.

If no sampling is required, the Permittee shall submit a written statement stating, "No sampling was required" within two weeks on initiation of in-water construction, and every two weeks thereafter.

Table 2: Sample Type and Frequency Requirements			
Parameter	Unit of Measurement	Type of Sample	Minimum Frequency
Turbidity	NTU	Grab	Every 4 hours
Settleable Material	ml/L	Grab	Every 4 hours
Visible construction related pollutants <sup>5</sup>	Observation	Visual Inspections	Continuous throughout the construction period

4. **Post-Construction:** Visually inspect the Project site during the rainy season for one year to ensure excessive erosion, stream instability, or other water quality pollution is not occurring in or downstream of the Project site. If water quality pollution is occurring, contact the Central Valley Water Board staff member overseeing the Project within three (3) working days. The Central Valley Water Board may require the submission of a Violation of Compliance with Water Quality Standards Report. Additional permits may be required to carry out any necessary site remediation.

#### D. Standard

1. This Order is subject to modification or revocation upon administrative or judicial review, including review and amendment pursuant to Water Code section 13330, and California Code of Regulations, Title 23, chapter 28, Article 6 commencing with

<sup>4</sup> Pollutants shall be analyzed using the analytical methods described in 40 Code of Federal Regulations Part 136; where no methods are specified for a given pollutant, the method shall be approved by Central Valley Water Board staff. Grab samples shall be taken between the surface and mid-depth and not be collected at the same time each day to get a complete representation of variations in the receiving water. A hand-held field meter may be used, provided the meter utilizes a U.S. EPA-approved algorithm/method and is calibrated and maintained in accordance with the manufacturer's instructions. A calibration and maintenance log for each meter used for monitoring shall be maintained onsite.

<sup>5</sup> Visible construction-related pollutants include oil, grease, foam, fuel, petroleum products, and construction-related, excavated, organic or earthen materials.

sections 3867-3869, inclusive. Additionally, the Central Valley Water Board reserves the right to suspend, cancel, or modify and reissue this Order, after providing notice to the Permittee, if the Central Valley Water Board determines that: the Project fails to comply with any of the conditions of this Order; or, when necessary to implement any new or revised water quality standards and implementation plans adopted or approved pursuant to the Porter-Cologne Water Quality Control Act (Water Code, section 13000 et seq.) or federal Clean Water Act section 303 (33 U.S.C. section 1313). For purposes of Clean Water Act section 401(d), the condition constitutes a limitation necessary to assure compliance with water quality standards and appropriate requirements of state law.

2. This Order is not intended and shall not be construed to apply to any activity involving a hydroelectric facility requiring a Federal Energy Regulatory Commission (FERC) license or an amendment to a FERC license, unless the pertinent certification application was filed pursuant to subsection 3855(b) of chapter 28, Title 23 of the California Code of Regulations, and that application specifically identified that a FERC license or amendment to a FERC license for a hydroelectric facility was being sought.
3. This Order is conditioned upon total payment of any fee required under Title 23 of the California Code of Regulations and owed by the Permittee.
4. In the event of any violation or threatened violation of the conditions of this Order, the violation or threatened violation shall be subject to any remedies, penalties, process, or sanctions as provided for under state and federal law. For purposes of Clean Water Act, section 401(d), the applicability of any state law authorizing remedies, penalties, processes, or sanctions for the violation or threatened violation constitutes a limitation necessary to assure compliance with the water quality standards and other pertinent requirements incorporated into this Order.

#### **E. General Compliance**

1. Failure to comply with any condition of this Order shall constitute a violation of the Porter-Cologne Water Quality Control Act and the Clean Water Act. The Permittee and/or discharger may then be subject to administrative and/or civil liability pursuant to Water Code section 13385.
2. Permitted actions must not cause a violation of any applicable water quality standards, including impairment of designated beneficial uses for receiving waters as adopted in the Basin Plans by any applicable Central Valley Water Board or any applicable State Water Board (collectively Water Boards) water quality control plan or policy. The source of any such discharge must be eliminated as soon as practicable.
3. In response to a suspected violation of any condition of this Order, the Central Valley Water Board may require the holder of this Order to furnish, under penalty of perjury, any technical or monitoring reports the Water Boards deem appropriate, provided that the burden, including costs, of the reports shall bear a reasonable relationship to the need for the reports and the benefits to be obtained from the reports. The additional monitoring requirements ensure that permitted discharges and activities comport with any applicable effluent limitations, water quality standards, and/or other appropriate requirement of state law.
4. The Permittee must, at all times, fully comply with engineering plans, specifications, and technical reports submitted to support this Order; and all subsequent submittals

required as part of this Order. The conditions within this Order and Attachments supersede conflicting provisions within Permittee submittals.

5. This Order and all of its conditions contained herein continue to have full force and effect regardless of the expiration or revocation of any federal license or permit issued for the Project. For purposes of Clean Water Act, section 401(d), this condition constitutes a limitation necessary to assure compliance with the water quality standards and other pertinent requirements of state law.
6. **Construction General Permit Requirement.** The Permittee shall obtain coverage under the National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities Order No. 2009-0009-DWQ, as amended, for discharges to surface waters comprised of storm water associated with construction activity, including, but not limited to, demolition, clearing, grading, excavation, and other land disturbance activities of one or more acres, or where projects disturb less than one acre but are part of a larger common plan of development that in total disturbs one or more acres.

#### F. Administrative

1. Signatory requirements for all document submittals required by this Order are presented in Attachment E of this Order.
2. This Order does not authorize any act which results in the taking of a threatened, endangered or candidate species or any act, which is now prohibited, or becomes prohibited in the future, under either the California Endangered Species Act (Fish & Wildlife Code, sections 2050-2097) or the federal Endangered Species Act (16 U.S.C. sections 1531-1544). If a "take" will result from any act authorized under this Order held by the Permittee, the Permittee must obtain authorization for the take prior to any construction or operation of the portion of the Project that may result in a take. The Permittee is responsible for meeting all requirements of the applicable endangered species act for the Project authorized under this Order.
3. The Permittee shall grant Central Valley Water Board staff, or an authorized representative (including an authorized contractor acting as a Water Board representative), upon presentation of credentials and other documents as may be required by law, permission to:
  - a. Enter upon the Project or compensatory mitigation site(s) premises where a regulated facility or activity is located or conducted, or where records are kept.
  - b. Have access to and copy any records that are kept and are relevant to the Project or the requirements of this Order.
  - c. Inspect any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Order.
  - d. Sample or monitor for the purposes of assuring Order compliance.
4. A copy of this Order shall be provided to any consultants, contractors, and subcontractors working on the Project. Copies of this Order shall remain at the Project site for the duration of this Order. The Permittee shall be responsible for work conducted by its consultants, contractors, and any subcontractors.
5. A copy of this Order must be available at the Project site(s) during construction for review by site personnel and agencies. All personnel performing work on the Project



shall be familiar with the content of this Order and its posted location at the Project site.

## **G. Construction**

### **1. Dewatering**

- a. The Permittee shall develop and maintain on-site a Surface Water Diversion and/or Dewatering Plan(s). The Plan(s) must be developed prior to initiation of any water diversions. The Plan(s) shall include the proposed method and duration of diversion activities and include water quality monitoring conducted, as described in section XIII.C.3, during the entire duration of dewatering and diversion activities. The Plan(s) must be consistent with this Order and must be made available to the Central Valley Water Board staff upon request.
- b. For any temporary dam or other artificial obstruction being constructed, maintained, or placed in operation, sufficient water shall at all times be allowed to pass downstream, to maintain beneficial uses of waters of the state below the dam. Construction, dewatering, and removal of temporary cofferdams shall not violate section XIII.C.3.
- c. The temporary dam or other artificial obstruction shall only be built from clean materials such as sandbags, gravel bags, water dams, or clean/washed gravel which will cause little or no siltation. Stream flow shall be temporarily diverted using gravity flow through temporary culverts/pipes or pumped around the work site with the use of hoses.
- d. If water is present, the area must be dewatered prior to start of work.
- e. This Order does not allow permanent water diversion of flow from the receiving water. This Order is invalid if any water is permanently diverted as a part of the project.
- f. The Permittee shall work with the Central Valley Water Board to obtain coverage under an NPDES permit for dewatering activities that result in discharges into surface water.

### **2. Directional Drilling**

- a. If installation or relocation of dry and/or wet utility lines is anticipated, the Applicant shall develop and submit a Dry and Wet Utility Work Plan to the Central Valley Water Board Contact indicated in this Certification prior to commencement of dry and wet utility construction. The Dry and Wet Utility Plan must cover all phases of the certified project that will impact waters of the United States and waters of the state], and shall be consistent with this Certification.

The Dry and Wet Utility Plan shall include the types of dry and wet utilities to be removed and installed, method and duration of activities, structure configuration, construction materials, equipment, erosion and sediment controls, and a map or drawing indicating the location(s) of dry and wet utility work, as related to any water of the United States and waters of the state, in the Project area.

Should the methodology for dry and wet utility work include directional drilling, the Dry and Wet Utility Plan shall incorporate a Directional Drilling Plan to address potential frac-outs. The Directional Drilling Plan shall include, but not be limited to, a description of directional drilling activities, dry and wet utility routes, crossing

locations and methods, and other geotechnical considerations (i.e., surficial overburden deposits, clays and shales, bedrock formations, hydrogeology), and a reporting procedure should any level of discharge from a frac-out occur, regardless of the discharge size.

The Directional Drilling Plan must be stamped by a California Registered Geologist or Engineer.

**3. Dredging – Not Applicable**

**4. Fugitive Dust – Not Applicable**

**5. Good Site Management “Housekeeping”**

- a. The Permittee shall develop and maintain onsite a project-specific Spill Prevention, Containment and Cleanup Plan outlining the practices to prevent, minimize, and/or clean up potential spills during construction of the Project. The Plan must detail the Project elements, construction equipment types and location, access and staging and construction sequence. The Plan must be made available to the Central Valley Water Board staff upon request.
- b. Refueling of equipment within the floodplain or within 300 feet of the waterway is prohibited. If critical equipment must be refueled within 300 feet of the waterway, spill prevention and countermeasures must be implemented to avoid spills. Refueling areas shall be provided with secondary containment including drip pans and/or placement of absorbent material. No hazardous materials, pesticides, fuels, lubricants, oils, hydraulic fluids, or other construction-related potentially hazardous substances should be stored within a floodplain or within 300 feet of a waterway. The Permittee must perform frequent inspections of construction equipment prior to utilizing it near surface waters to ensure leaks from the equipment are not occurring and are not a threat to water quality.
- c. All materials resulting from the Project shall be removed from the site and disposed of properly.

**6. Hazardous Materials**

- a. The discharge of petroleum products, any construction materials, hazardous materials, pesticides, fuels, lubricants, oils, hydraulic fluids, raw cement, concrete or the washing thereof, asphalt, paint, coating material, drilling fluids, or other substances potentially hazardous to fish and wildlife resulting from or disturbed by project-related activities is prohibited and shall be prevented from contaminating the soil and/or entering waters of the state. In the event of a prohibited discharge, the Permittee shall comply with notification requirements in sections XIII.B.3.a and XIII.B.3.b.
- b. Concrete must be completely cured before coming into contact with waters of the United States and waters of the state. Surface water that contacts wet concrete must be pumped out and disposed of at an appropriate off-site commercial facility, which is authorized to accept concrete wastes.

**7. Invasive Species and Soil Borne Pathogens – Not Applicable**

**8. In-Water Work**

- a. In-water work shall occur during periods of no precipitation.

**9. Post-Construction Storm Water Management**

- a. The Permittee must minimize the short and long-term impacts on receiving water quality from the Project by implementing the following post-construction storm water management practices and as required by local agency permitting the Project, as appropriate:
  - i. Minimize the amount of impervious surface;
  - ii. Provide treatment BMPs to reduce pollutants in runoff;
  - iii. Ensure existing waters of the state (e.g., wetlands, vernal pools, or creeks) are not used as pollutant source controls and/or treatment controls;
  - iv. Preserve and where possible, create or restore areas that provide important water quality benefits, such as riparian corridors, wetlands, and buffer zones;
  - v. Limit disturbances of natural water bodies and natural drainage systems caused by development (including development of roads, highways, and bridges);
  - vi. Use existing drainage master plans or studies to ensure incorporation of structural and non-structural BMPs to mitigate the projected pollutant load increases in surface water runoff;
  - vii. Identify and avoid development in areas that are particularly susceptible to erosion and sediment loss, or establish development guidance that protects areas from erosion/ sediment loss; and
  - viii. Control post-development peak storm water run-off discharge rates and velocities to prevent or reduce downstream erosion, and to protect stream habitat.
- b. The Permittee shall ensure that all development within the Project provides verification of maintenance provisions for post-construction structural and treatment control BMPs as required by the local agency permitting the Project. Verification shall include one or more of the following, as applicable:
  - i. The developer's signed statement accepting responsibility for maintenance until the maintenance responsibility is legally transferred to another party; or
  - ii. Written conditions in the sales or lease agreement that require the recipient to assume responsibility for maintenance; or
  - iii. Written text in Project conditions, covenants and restrictions for residential properties assigning maintenance responsibilities to a home owner's association, or other appropriate group, for maintenance of structural and treatment control BMPs; or
  - iv. Any other legally enforceable agreement that assigns responsibility for storm water BMPs maintenance.

**10. Roads**

- a. Levee embankment borrow material for Sacramento River East Levee Improvements area will be obtained from existing stockpiles on the Sacramento Regional County Sanitation District (SRCSD) wastewater treatment plant site

(SRWTP). Borrow material will be transported to the levee improvement areas via I-5 and roads such as Broadway, Seamas Avenue, Florin Road, Pocket Road, and Beach Lake Road.

#### **11. Sediment Control**

- a. Except for activities permitted by the United States Army Corps of Engineers under Section 404 of the Clean Water Act and/or Section 10 of the Rivers and Harbors Act, soil, silt, or other organic materials shall not be placed where such materials could pass into surface water or surface water drainage courses.
- b. Silt fencing, straw wattles, or other effective management practices must be used along the construction zone to minimize soil or sediment along the embankments from migrating into the waters of the state through the entire duration of the Project.
- c. The use of netting material (e.g., monofilament-based erosion blankets) that could trap aquatic dependent wildlife is prohibited within the Project area.

#### **12. Special Status Species**

- a. Federally-threatened Giant Garter Snake (GGS; *Thamnophis gigas*), Central Valley steelhead (*Oncorhynchus mykiss*), Central Valley spring-run chinook salmon (*Oncorhynchus tshawytscha*). Federally-endangered Central Valley winter-run Chinook salmon (*Oncorhynchus tshawytscha*).

#### **13. Stabilization/Erosion Control**

- a. All areas disturbed by Project activities shall be protected from washout and erosion.
- b. Hydroseeding shall be performed with California native seed mix.

#### **14. Storm Water**

- a. During the construction phase, the Permittee must employ strategies to minimize erosion and the introduction of pollutants into storm water runoff. These strategies must include the following:
  - i. The Storm Water Pollution Prevention Plan must be prepared during the Project planning and design phases and implemented, as appropriate, before construction; and
  - ii. An effective combination of erosion and sediment control Best Management Practices (BMPs) must be implemented and adequately working prior to the rainy season and during all phases of construction.

#### **H. Site Specific – Not Applicable**

#### **I. Total Maximum Daily Load (TMDL) – Not Applicable**

#### **J. Mitigation for Temporary Impacts**

1. The Permittee shall restore all areas of temporary impacts, including Project site upland areas, which could result in a discharge to waters of the state to pre-construction contours and conditions upon completion of construction activities. Upon completion of the Project, the Permittee shall ensure that all habitat is successfully

restored and implemented by the contractor. The Permittee shall submit a Restoration Plan to the Central Valley Water Board for review and written approval for temporary impacts resulting from project activities. The Restoration Plan shall ensure recovery or enhancement of impacted habitat, and fish and wildlife resource values. The Restoration Plan shall include use of a local California native plant palette, success criteria, and corrective actions to be taken if success criteria are not met.

2. The Central Valley Water Board may extend the monitoring period beyond requirements of the restoration plan upon a determination by Executive Officer that the performance standards have not been met or are not likely to be met within the monitoring period.
3. If restoration of temporary impacts to waters of the state is not completed within 90 days of the impacts, compensatory mitigation may be required to offset temporal loss of waters of the state.

#### **K. Compensatory Mitigation for Permanent Impacts<sup>6</sup>**

##### **1. Compensatory Mitigation Plan**

- a. The Permittee shall submit a compensatory mitigation plan as part of a complete application. Impacts to waters of the state are not authorized and shall not occur until a compensatory mitigation plan has been approved by Central Valley Water Board staff. Upon acceptance by Central Valley Water Board staff, the Permittee shall implement the approved plan.
- b. The compensatory mitigation plan shall include all plan elements as outlined in 40 CFR section 230.94(c)
- c. Permittees fulfilling their compensatory mitigation obligations by securing credits from an approved mitigation bank or in-lieu fee program, need only include the items described in 40 CFR section 230.94(c)(5)-(6), and the name of the specific mitigation bank or in-lieu fee program to be used.
- a. The Permittee is required to provide compensatory mitigation for the authorized impact to riparian habitat as required by the California Department of Fish and Wildlife.

#### **L. Certification Deviation**

1. Minor modifications of Project locations or predicted impacts may be necessary as a result of unforeseen field conditions, necessary engineering re-design, construction concerns, or similar reasons. Some of these prospective Project modifications may have impacts on water quality. Some modifications of Project locations or predicted impacts may qualify as Certification Deviations as set forth in Attachment F. For purposes of this Certification, a "Certification Deviation" is a Project locational or impact modification that does not require an immediate amendment of the Order, because the Central Valley Water Board has determined that any potential water quality impacts that may result from the change are sufficiently addressed by the Order conditions and the CEQA Findings. After the termination of construction, this Order will be formally amended to reflect all authorized Certification Deviations and any resulting

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<sup>6</sup> Compensatory Mitigation is for permanent physical loss and permanent ecological degradation of a water of the state.

adjustments to the amount of water resource impacts and required compensatory mitigation amounts.

2. A Project modification shall not be granted a Certification Deviation if it warrants or necessitates changes that are not addressed by the Order conditions or the CEQA environmental document such that the Project impacts are not addressed in the Project's environmental document or the conditions of this Order. In this case a supplemental environmental review and different Order will be required.

#### **XIV. Water Quality Certification**

I hereby issue the Order for the North Sacramento Levee Accreditation Project, WDID No. 5A34CR00663 certifying that as long as all of the conditions listed in this Order are met, any discharge from the referenced Project will comply with the applicable provisions of Clean Water Act sections 301 (Effluent Limitations), 302 (Water Quality Related Effluent Limitations), 303 (Water Quality Standards and Implementation Plans), 306 (National Standards of Performance), and 307 (Toxic and Pretreatment Effluent Standards). This discharge is also regulated pursuant to State Water Board Water Quality Order No. 2003-0017-DWQ which authorizes this Order to serve as Waste Discharge Requirements pursuant to the Porter-Cologne Water Quality Control Act (Water Code, section 13000 et seq.).

Except insofar as may be modified by any preceding conditions, all Order actions are contingent on: (a) the discharge being limited and all proposed mitigation being completed in strict compliance with the conditions of this Order and the attachments to this Order; and, (b) compliance with all applicable requirements of Statewide Water Quality Control Plans and Policies, the Regional Water Boards' Water Quality Control Plans and Policies.



Pamela C. Creedon

Executive Officer

Central Valley Regional Water Quality Control Board

7/5/2017  
Date

<b>Attachment A</b>	Project Map
<b>Attachment B</b>	Receiving Waters, Impact, and Mitigation Information
<b>Attachment C</b>	CEQA Findings of Facts
<b>Attachment D</b>	Report and Notification Requirements
<b>Attachment E</b>	Signatory Requirements
<b>Attachment F</b>	Certification Deviation Procedures

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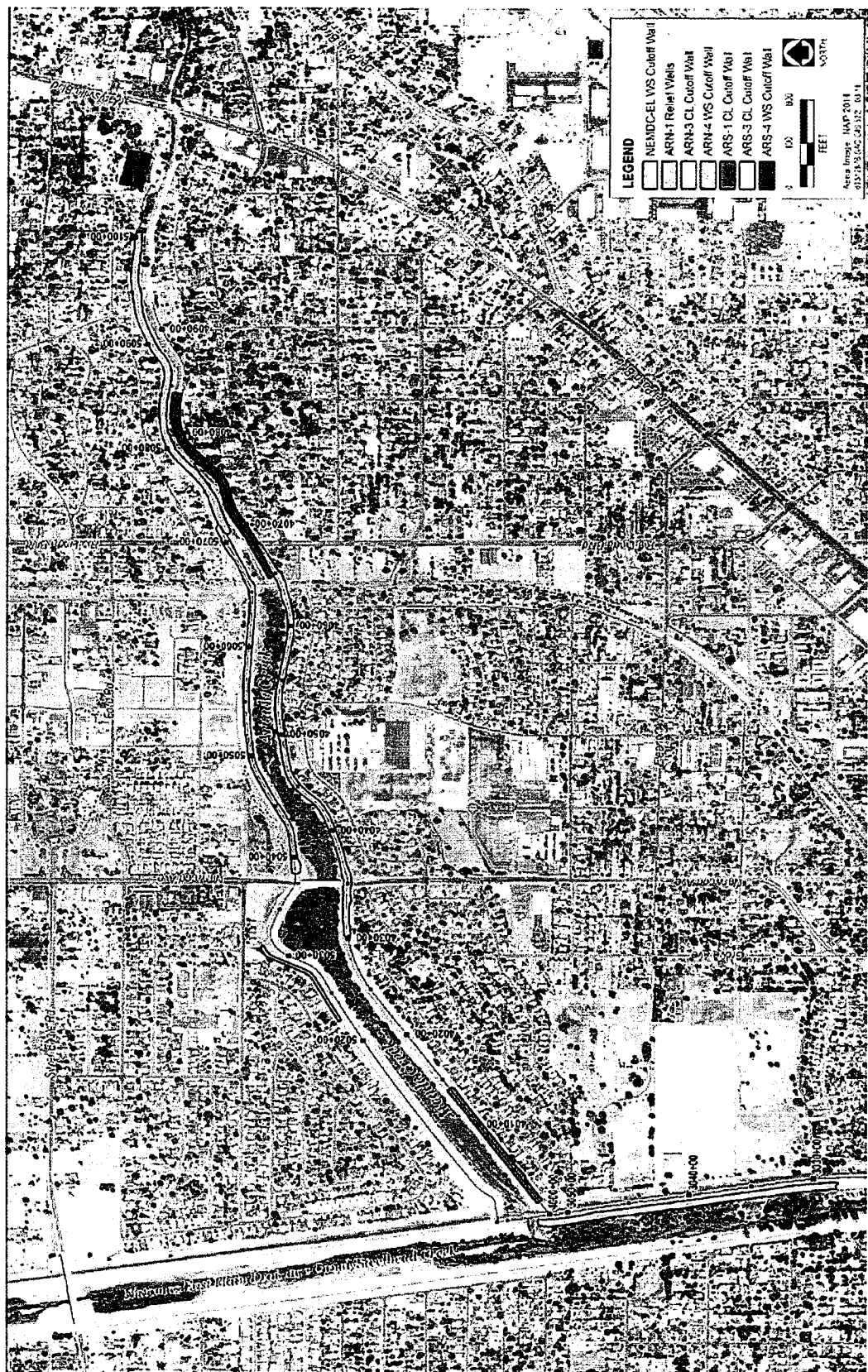
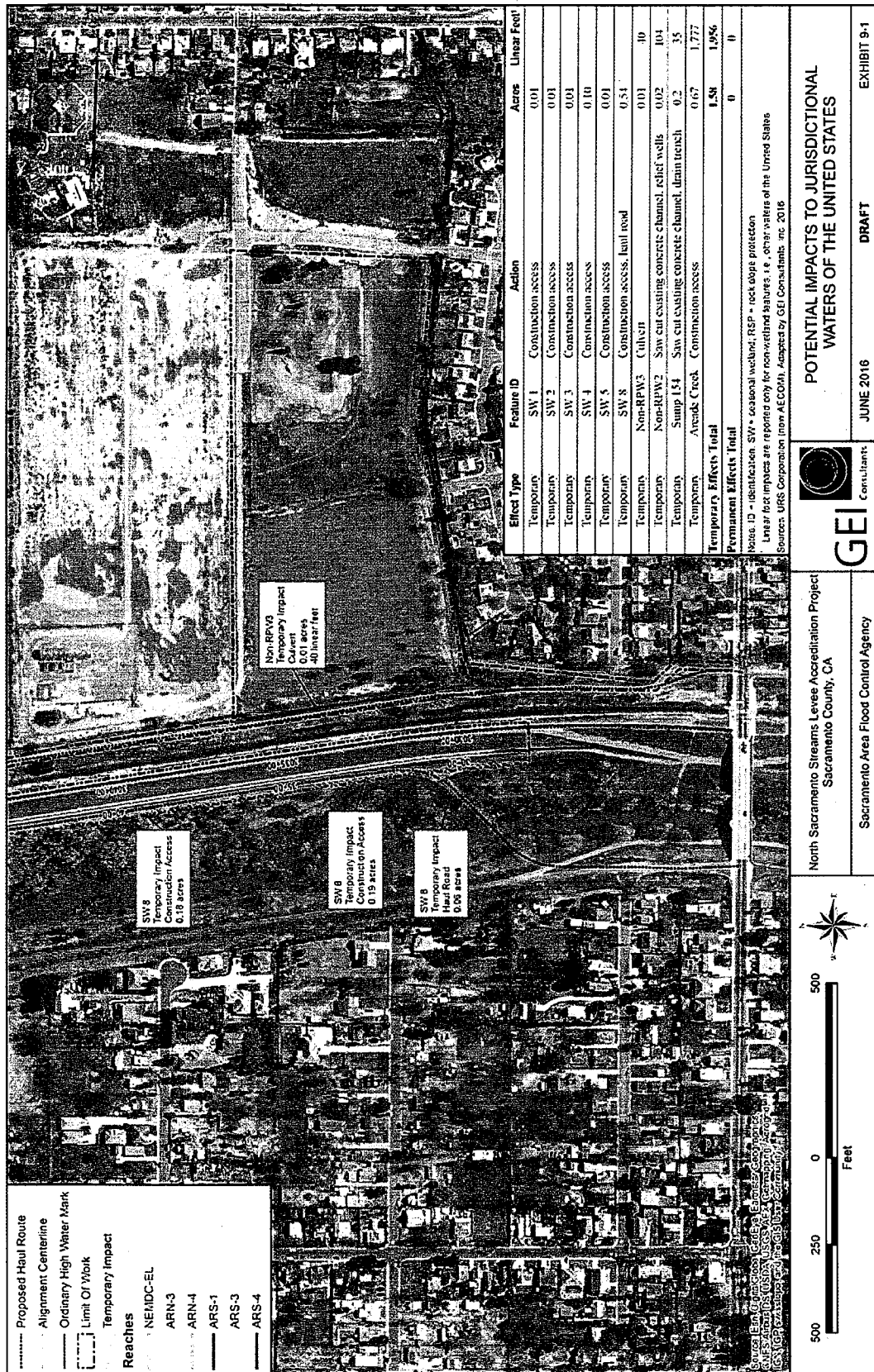


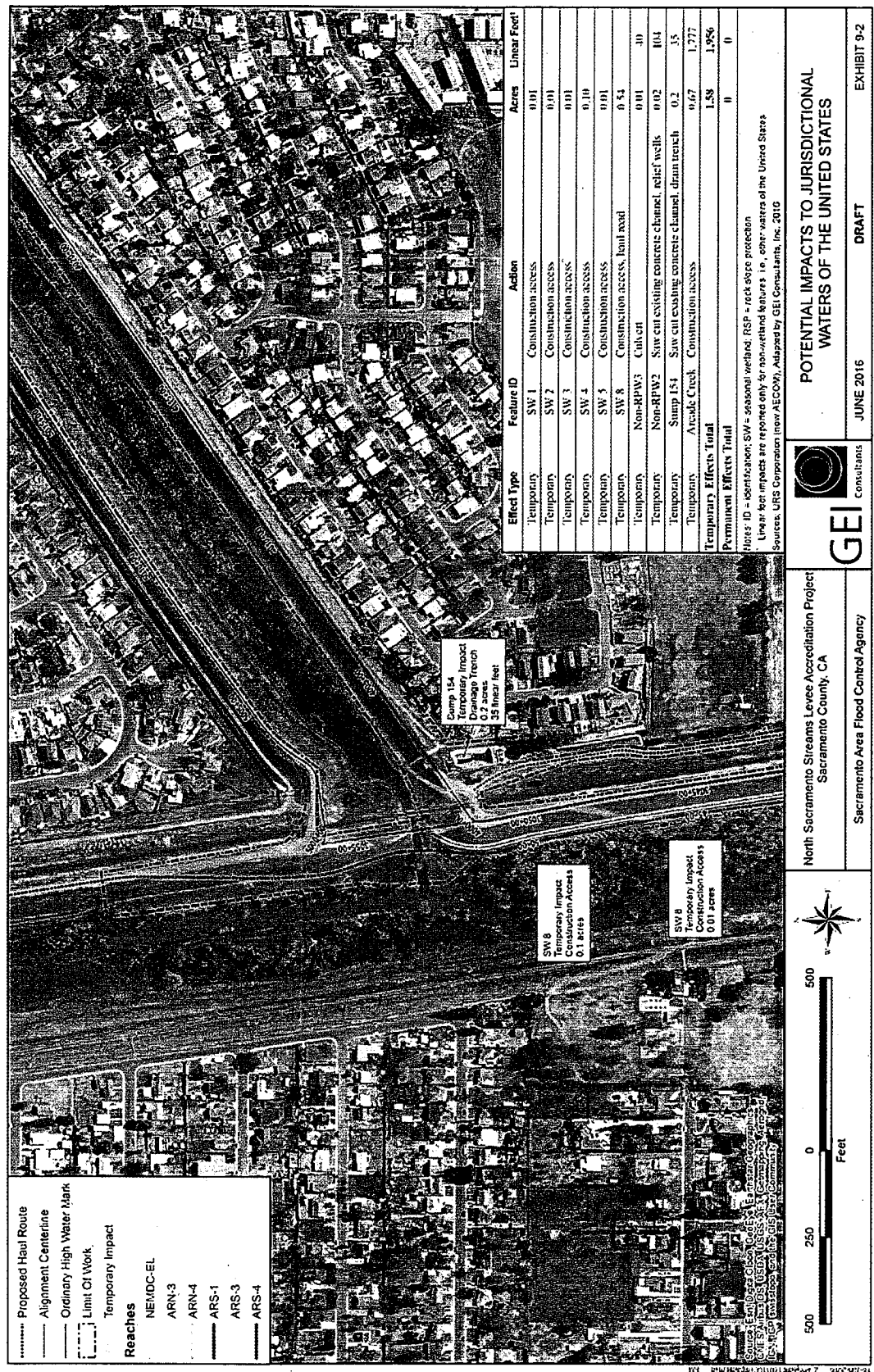
Exhibit 2. Proposed Project Levee Improvement Reaches



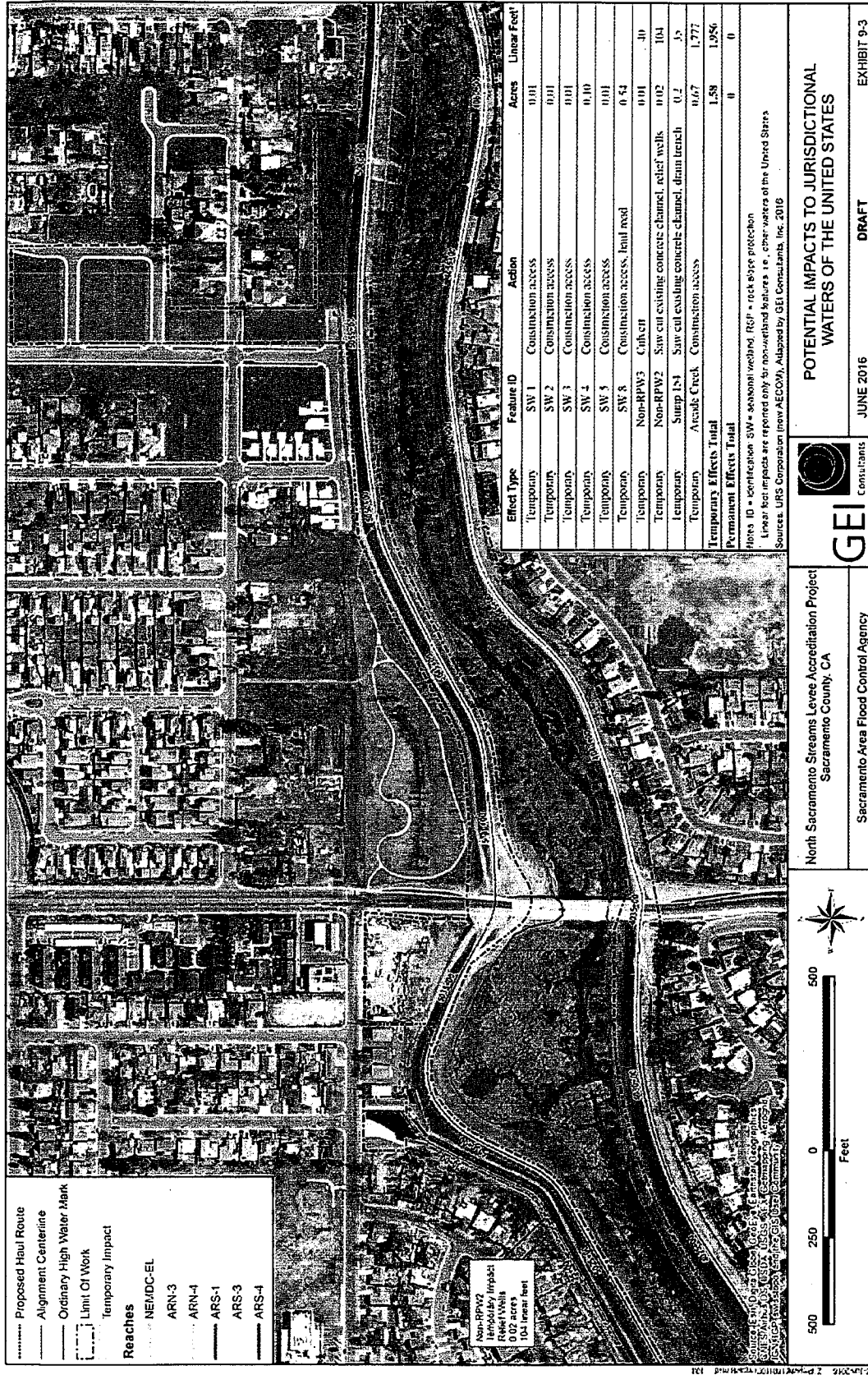


Sources: URS Corporation (now AECOM) 2016, Adapted by GEI Consultants, Inc. in 2018

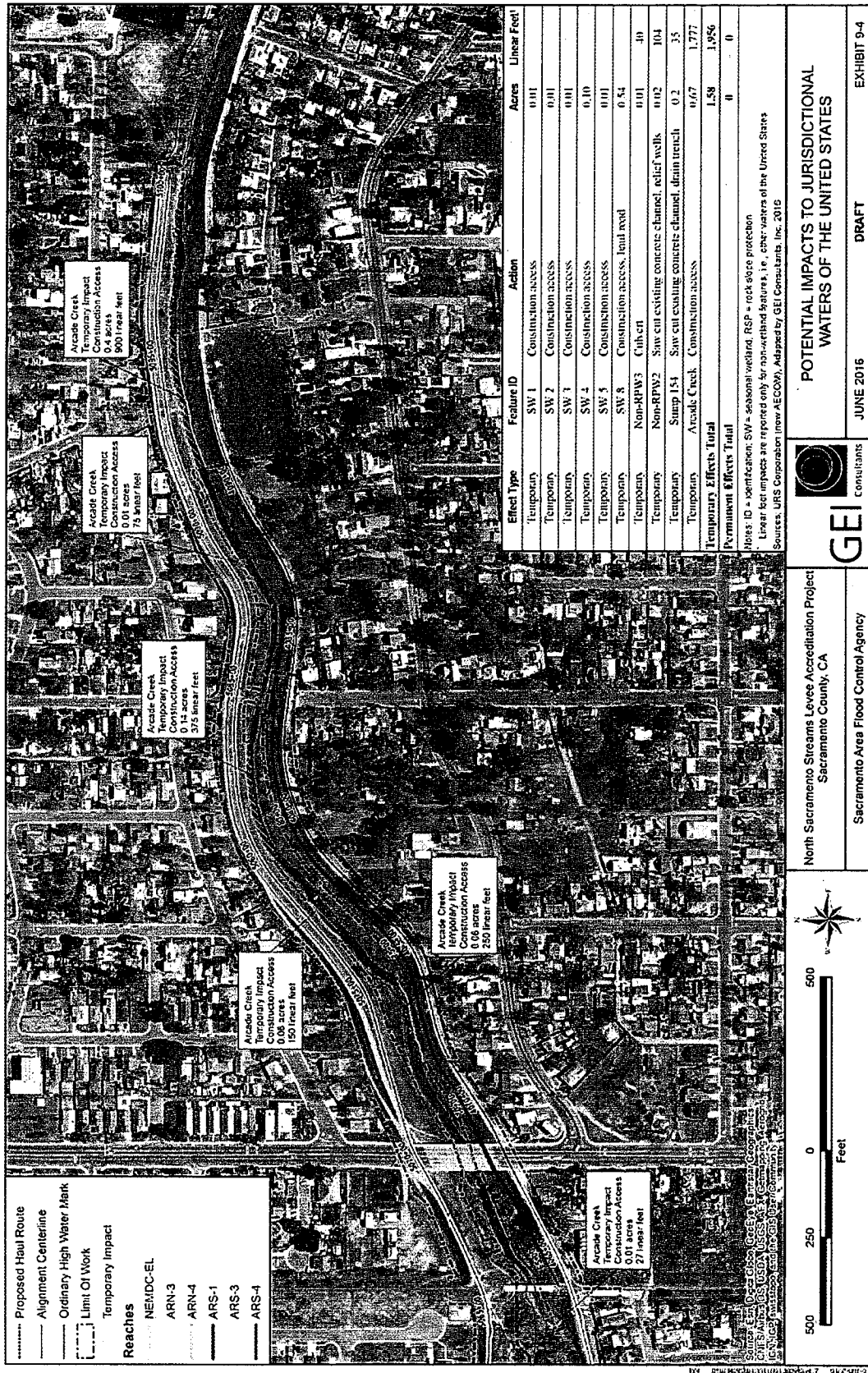


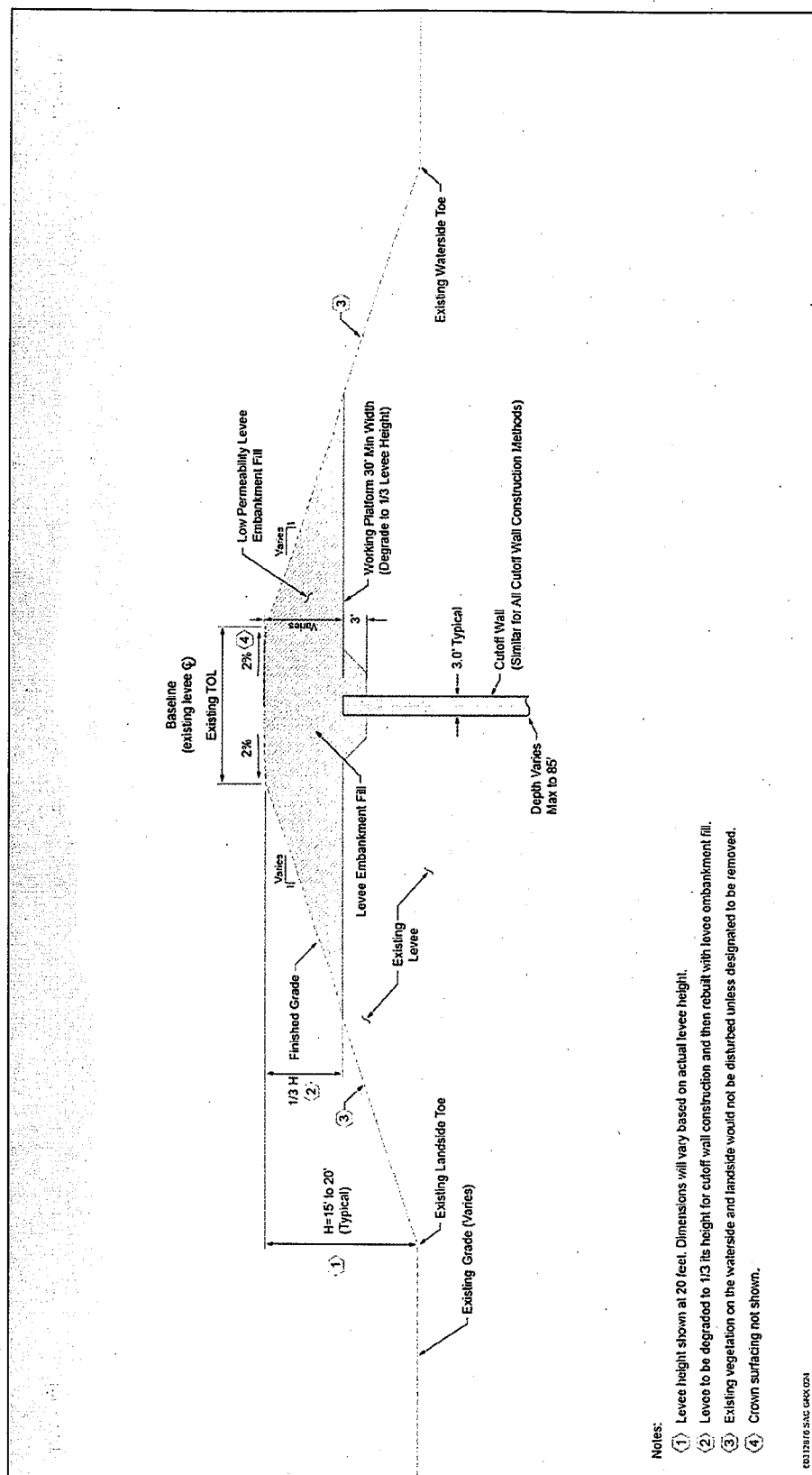


Source: URS Corporation (now AECOM) 2016. Adapted by GEI Consultants, Inc. in 2018









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## Receiving Waters

The following table shows the receiving waters associated with each impact site.

**Table 1: Receiving Water(s) Information**

Site ID	Waterbody Name	Impacted Aquatic Resource Type	Water Board Hydrologic Units	Receiving Waters	Receiving Waters Beneficial Uses	303d Listing Pollutant	CRAM AA ID <sup>7</sup>
Natomas East Main Draining Canal (NEMDC-EL)	Natomas East Main Draining Canal (AKA Steelhead Creek, upstream of confluence with Arcade Creek)		519.21	Sacramento River	MUN, AGR, IND, POW, REC-1, REC-2, WARM, COLD, MIGR, SPWN, WILD	PCBs (polychlorinated biphenyls)	N/A
Natomas East Main Draining Canal (NEMDC-EL)	Natomas East Main Draining Canal (AKA Steelhead Creek, downstream of confluence with Arcade Creek)		519.21	Sacramento River	MUN, AGR, IND, POW, REC-1, REC-2, WARM, COLD, MIGR, SPWN, WILD	Diazinon, Mercury, PCBs (polychlorinated biphenyls)	N/A
Arcade Creek South Levee (ARS-1)	Arcade Creek		519.21	Sacramento River	MUN, AGR, IND, POW, REC-1, REC-2, WARM, COLD, MIGR, SPWN, WILD	Chlorpyrifos, Copper, Diazinon, Malathion, Pyrethroids, Sediment Toxicity	N/A
Arcade Creek South Levee (ARS-3)	Arcade Creek		519.21	Sacramento River	MUN, AGR, IND, POW, REC-1, REC-2, WARM, COLD, MIGR, SPWN, WILD	Chlorpyrifos, Copper, Diazinon, Malathion, Pyrethroids, Sediment Toxicity	N/A

<sup>7</sup> California Rapid Assessment Method (CRAM) score of impacted sites provided by the Permittee.



**Table 1: Receiving Water(s) Information**

Site ID	Waterbody Name	Impacted Aquatic Resource Type	Water Board Hydrologic Units	Receiving Waters	Receiving Waters Beneficial Uses	303d Listing Pollutant	CRAM AA ID <sup>7</sup>
Arcade Creek South Levee (ARS-4)	Arcade Creek		519.21	Sacramento River	MUN, AGR, IND, POW, REC-1, REC-2, WARM, COLD, MIGR, SPWN, WILD	Chlorpyrifos, Copper, Diazinon, Malathion, Pyrethroids, Sediment Toxicity	N/A
Arcade Creek North Levee (ARN-1)	Arcade Creek		519.21	Sacramento River	MUN, AGR, IND, POW, REC-1, REC-2, WARM, COLD, MIGR, SPWN, WILD	Chlorpyrifos, Copper, Diazinon, Malathion, Pyrethroids, Sediment Toxicity	N/A
Arcade Creek North Levee (ARN-3)	Arcade Creek		519.21	Sacramento River	MUN, AGR, IND, POW, REC-1, REC-2, WARM, COLD, MIGR, SPWN, WILD	Chlorpyrifos, Copper, Diazinon, Malathion, Pyrethroids, Sediment Toxicity	N/A
Arcade Creek North Levee (ARN-4)	Arcade Creek		519.21	Sacramento River	MUN, AGR, IND, POW, REC-1, REC-2, WARM, COLD, MIGR, SPWN, WILD	Chlorpyrifos, Copper, Diazinon, Malathion, Pyrethroids, Sediment Toxicity	N/A
Seasonal Wetland 1 (SW-1)	Natomas East Main Draining Canal (AKA Steelhead Creek, upstream of confluence with Arcade Creek)	Seasonal Wetland	519.21	Sacramento River	MUN, AGR, IND, POW, REC-1, REC-2, WARM, COLD, MIGR, SPWN, WILD	PCBs (polychlorinated biphenyls)	N/A

**Table 1: Receiving Water(s) Information**

Site ID	Waterbody Name	Impacted Aquatic Resource Type	Water Board Hydrologic Units	Receiving Waters	Receiving Waters Beneficial Uses	303d Listing Pollutant	CRAM AA ID <sup>7</sup>
Seasonal Wetland 2 (SW-2)	Natomas East Main Draining Canal (AKA Steelhead Creek, upstream of confluence with Arcade Creek)	Seasonal Wetland	519.21	Sacramento River	MUN, AGR, IND, POW, REC-1, REC-2, WARM, COLD, MIGR, SPWN, WILD	PCBs (polychlorinated biphenyls)	N/A
Seasonal Wetland 3 (SW-3)	Natomas East Main Draining Canal (AKA Steelhead Creek, upstream of confluence with Arcade Creek)	Seasonal Wetland	519.21	Sacramento River	MUN, AGR, IND, POW, REC-1, REC-2, WARM, COLD, MIGR, SPWN, WILD	PCBs (polychlorinated biphenyls)	N/A
Seasonal Wetland 4 (SW-4)	Natomas East Main Draining Canal (AKA Steelhead Creek, upstream of confluence with Arcade Creek)	Seasonal Wetland	519.21	Sacramento River	MUN, AGR, IND, POW, REC-1, REC-2, WARM, COLD, MIGR, SPWN, WILD	PCBs (polychlorinated biphenyls)	N/A
Seasonal Wetland 5 (SW-5)	Natomas East Main Draining Canal (AKA Steelhead Creek, upstream of confluence with Arcade Creek)	Seasonal Wetland	519.21	Sacramento River	MUN, AGR, IND, POW, REC-1, REC-2, WARM, COLD, MIGR, SPWN, WILD	PCBs (polychlorinated biphenyls)	N/A
Seasonal Wetland 8 (SW-8)	Natomas East Main Draining Canal (AKA Steelhead Creek, downstream of confluence with Arcade Creek)	Seasonal Wetland	519.21	Sacramento River	MUN, AGR, IND, POW, REC-1, REC-2, WARM, COLD, MIGR, SPWN, WILD	Diazinon, Mercury, PCBs (polychlorinated biphenyls)	N/A

**Table 1: Receiving Water(s) Information**

Site ID	Waterbody Name	Impacted Aquatic Resource Type	Water Board Hydrologic Units	Receiving Waters	Receiving Waters Beneficial Uses	303d Listing Pollutant	CRAM AA ID <sup>7</sup>
Non-RPW3	Natomas East Main Draining Canal (AKA Steelhead Creek, downstream of confluence with Arcade Creek)	Streambed	519.21	Sacramento River	MUN, AGR, IND, POW, REC-1, REC-2, WARM, COLD, MIGR, SPWN, WILD	Diazinon, Mercury, PCBs (polychlorinated biphenyls)	N/A
Non-RPW2	Arcade Creek	Streambed	519.21	Sacramento River	MUN, AGR, IND, POW, REC-1, REC-2, WARM, COLD, MIGR, SPWN, WILD	Chlorpyrifos, Copper, Diazinon, Malathion, Pyrethroids, Sediment Toxicity	N/A
Sump 154	Arcade Creek	Streambed	519.21	Sacramento River	MUN, AGR, IND, POW, REC-1, REC-2, WARM, COLD, MIGR, SPWN, WILD	Chlorpyrifos, Copper, Diazinon, Malathion, Pyrethroids, Sediment Toxicity	N/A
Arcade Creek	Arcade Creek	Streambed	519.21	Sacramento River	MUN, AGR, IND, POW, REC-1, REC-2, WARM, COLD, MIGR, SPWN, WILD	Chlorpyrifos, Copper, Diazinon, Malathion, Pyrethroids, Sediment Toxicity	N/A

### Individual Direct Impact Locations

The following table shows individual impact locations.

Table 2: Individual Direct Impact Information												
Site ID	Latitude	Longitude	Indirect Impact Requiring Mitigation		Direct Impact Duration	Dredge			Fill/Excavation			
			Yes	No		Acres	Cubic Yards	Linear Feet	Acres	Cubic Yards	Linear Feet	
Natomas East Main Draining Canal (NEMDC-EL)	38.620	-121.468	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Temporary							
					Permanent							
Arcade Creek South Levee (ARS-1)	38.620	-121.468	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Temporary							
					Permanent							
Arcade Creek South Levee (ARS-3)	38.620	-121.468	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Temporary							
					Permanent							
Arcade Creek South Levee (ARS-4)	38.620	-121.468	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Temporary							
					Permanent							
Arcade Creek North Levee (ARN-1)	38.620	-121.468	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Temporary							
					Permanent							
Arcade Creek North Levee (ARN-3)	38.620	-121.468	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Temporary							
					Permanent							
Arcade Creek North Levee (ARN-4)	38.620	-121.468	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Temporary							
					Permanent							
Seasonal Wetland 1 (SW-1)	38.661	-121.476	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Temporary					0.01		
					Permanent							
Seasonal Wetland 2 (SW-2)	38.660	-121.476	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Temporary					0.01		
					Permanent							
Seasonal Wetland 3 (SW-3)	38.659	-121.476	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Temporary					0.01		
					Permanent							

**Table 2: Individual Direct Impact Information**

Site ID	Latitude	Longitude	Indirect Impact Requiring Mitigation		Direct Impact Duration	Dredge			Fill/Excavation		
			Yes	No		Acres	Cubic Yards	Linear Feet	Acres	Cubic Yards	Linear Feet
Seasonal Wetland 4 (SW-4)	38.658	-121.476	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Temporary				0.10		
Seasonal Wetland 5 (SW-5)	38.675	-121.476	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Temporary				0.01		
Seasonal Wetland 8 (SW-8)	38.617	-121.467	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Temporary				0.54		
Non-RPW3	38.614	121.466	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Temporary				0.01		40
Non-RPW2	38.624	-121.460	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Temporary				0.02		104
Sump 154	38.619	-121.467	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Temporary				0.2		35
Arcade Creek	38.627	-121.441	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Temporary				0.67		1,777
					Permanent						

### **Compensatory Mitigation Information**

The following table(s) show individual compensatory mitigation information and locations.

#### **Permittee Responsible Compensatory Mitigation Site Information**

<b>Table 3: Onsite Permittee Responsible Compensatory Mitigation<sup>8</sup></b>					
Site ID	Lat.	Long.	Aquatic Resource Type	Mitigation Quantity	
				Acres	Linear Feet
Natomas East Main Draining Canal (NEMDC-EL)	38.620	-121.468	Riparian Habitat	0.50	
ARS-1, ARS-3, ARS-4, ARN-1, ARN-3, ARN-4	38.620	-121.468	Riparian Habitat	0.28	

<sup>8</sup> Mitigation site is analyzed in the Project CEQA document.

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#### **A. Environmental Review**

On 21 July 2016, the Sacramento Area Flood Control Agency, as lead agency, certified a Final Environmental Impact Report (FEIR)) (State Clearinghouse (SCH) No. 2014052038) for the Project and filed a Notice of Determination (NOD) at the SCH on 22 July 2016. The Central Valley Water Board is a responsible agency under CEQA (Public Resources Code, section 21069) and in making its determinations and findings, must presume that Sacramento Area Flood Control Agency's certified environmental document comports with the requirements of CEQA and is valid. (Public Resources Code, section 21167.3.) The Central Valley Water Board has reviewed and considered the environmental document and finds that the environmental document prepared by Sacramento Area Flood Control Agency addresses the Project's water resource impacts. (California Code of Regulations, Title 14, section 15096, subd. (f).) The environmental document includes the mitigation monitoring and reporting program (MMRP) developed by Sacramento Area Flood control Agency for all mitigation measures that have been adopted for the Project to reduce potential significant impacts. (Public Resources Code, section 21081.6, subd. (a)(1); California Code of Regulations, Title 14, section 15091, subd. (d).)

#### **B. Incorporation by Reference**

Pursuant to CEQA, these Findings of Facts (Findings) support the issuance of this Order based on the Project FEIR, the application for this Order, and other supplemental documentation.

All CEQA project impacts, including those discussed in subsection C below, are analyzed in detail in the Project FEIR which is incorporated herein by reference. The Project EIR and FEIR is available at: Sacramento Area Flood Control Agency, 1007 7<sup>th</sup> Street, 7<sup>th</sup> Floor, Sacramento, CA 95814.

Requirements under the purview of the Central Valley Water Board in the MMRP are incorporated herein by reference.

The Permittee's application for this Order, including all supplemental information provided, is incorporated herein by reference.

#### **C. Findings**

The FEIR describes the potential significant environmental effects to water resources. Having considered the whole of the record, including comments received during the public review process, the Central Valley Water Board makes the following findings:

- (1) Findings regarding impacts that will be avoided or mitigated to a less than significant level. (Public Resources Code, section 21081, subd. (a)(1); California Code of Regulations, Title 14, section 15091, subd. (a)(1).)

*Changes or alterations have been required in, or incorporated into, the Project which avoid or substantially lessen the significant environmental effect as identified in the FEIR.*

##### **IMPACT WQ-1**

Possible Temporary and Short-term Impacts on Water Quality from Stormwater Runoff, Erosion, and Spills Associated with Construction. Ground-disturbing activities associated with project construction could cause soil erosion and sedimentation of local drainages and waterways. Construction activities could also discharge waste petroleum products or other



construction-related substances that could enter these waterways in runoff. Excavation, grading, and shaping of the project study area could increase turbidity, sedimentation, and contaminants above ambient levels identified in the Basin Plan for the Sacramento River. Therefore, this impact would be potentially significant throughout the project study area.

**a.i. Potential Significant Impact:** (North Sacramento Streams Levee Improvements)

Construction activities associated with levee improvements, encroachment removal, vegetation management, and the Conservation Strategy could involve storage and use of toxic and other harmful substances near Arcade, Dry, and Robla Creeks and NEMDC/Steelhead Creek, which could result in discharge of these substances to the Sacramento River or other water bodies. Construction activities would involve the use of heavy equipment, cranes, compactors, and other construction equipment that uses potentially harmful products such as fuels, lubricants, hydraulic fluids, and coolants, all of which can be toxic to fish and other aquatic organisms. The use of this equipment could be a direct source of contamination if equipment and construction practices were not properly followed. An accidental spill or inadvertent discharge from such equipment could directly affect the water quality of the river or water body in the project area, and indirectly affect regional water quality of the river or water body. Therefore, these proposed project elements could have a potentially significant impact. Mitigation Measures GEO-1, GM-1, and HAZ-1, described below, have been identified to address this impact.

**a.ii. Facts in Support of Finding:**

**Mitigation Measure:** Implement **Mitigation Measure GEO-1** (Acquire Appropriate Regulatory Permits and Prepare and Implement a Storm Water Pollution Prevention Plan and Associated Best Management Practices).

**Timing:** Submittal of the State Construction General Permit NOI and SWPPP before the start of earthmoving activities, and implementation of BMPs throughout project construction.

**Responsibility:** Sacramento Area Flood Control Agency.

**Mitigation Measure:** Implement **Mitigation Measure GM-1** (Implement Conservation Strategy Measures to Reduce Erosion and Sediment Transport).

**Timing:** During and after project construction.

**Responsibility:** Sacramento Area Flood Control Agency.

**Mitigation Measure:** Implement **Mitigation Measure HAZ-1** (Implement Conservation Strategy Measures such as a Spill Prevention and Control Plan to Reduce the Potential for Environmental Contamination during Construction Activities).

**Timing:** During construction activities.

**Responsibility:** Sacramento Area Flood Control Agency.

**Significance after Mitigation:** Implementation of Mitigation Measures GEO-1, GM-1, and HAZ-1 would reduce potentially significant temporary and short-term construction-related water quality impacts to a **less-than-significant level** by requiring preparation and implementation of a SWPPP with appropriate BMPs such as source control and revegetation to reduce erosion and by requiring preparation and implementation of a spill prevention and control plan along with other measures designed to prevent contamination of the environment from hazardous materials and maintain surface water quality conditions in adjacent receiving waters.

**b.i. Potential Significant Impact:** (Natomas East Main Drainage Canal/Steelhead Creek Corridor Management Plan)

Construction activities associated with the NEMDC/Steelhead Creek CMP could involve storage and use of small amounts of toxic and other harmful substances near Arcade, Dry, Robla, and NEMDC/Steelhead Creeks, which could result in discharge of these substances to the Sacramento River or other water bodies. Construction equipment uses potentially harmful products such as fuels, lubricants, hydraulic fluids, and coolants, all of which can be toxic to fish and other aquatic organisms. The use of this equipment could be a direct source of contamination if equipment and construction practices were not properly followed. An accidental spill or inadvertent discharge from such equipment could directly affect the water quality of the river or water body in the project area, and indirectly affect regional water quality of the river or water body. Therefore, this proposed project element could have a potentially significant impact. Mitigation Measures GEO-1, GM-1, and HAZ-1, described below, have been identified to address this impact.

**b.ii. Facts in Support of Finding:**

**Mitigation Measure:** Implement **Mitigation Measure GEO-1** (Acquire Appropriate Regulatory Permits and Prepare and Implement a Storm Water Pollution Prevention Plan and Associated Best Management Practices).

**Timing:** Submittal of the State Construction General Permit NOI and SWPPP before the start of earthmoving activities, and implementation of BMPs throughout project construction.

**Responsibility:** Sacramento Area Flood Control Agency.

**Mitigation Measure:** Implement **Mitigation Measure GM-1** (Implement Conservation Strategy Measures to Reduce Erosion and Sediment Transport).

**Timing:** During and after project construction.

**Responsibility:** Sacramento Area Flood Control Agency.

**Mitigation Measure:** Implement **Mitigation Measure HAZ-1** (Implement Conservation Strategy Measures such as a Spill Prevention and Control Plan to Reduce the Potential for Environmental Contamination during Construction Activities).

**Timing:** During construction activities.

**Responsibility:** Sacramento Area Flood Control Agency.

**Significance after Mitigation:** Implementation of Mitigation Measures GEO-1, GM-1, and HAZ-1 would reduce potentially significant temporary and short-term construction-related water quality impacts to a **less-than-significant level** by requiring preparation and implementation of a SWPPP with appropriate BMPs such as source control and revegetation to reduce erosion and by requiring preparation and implementation of a spill prevention and control plan along with other measures designed to prevent contamination of the environment from hazardous materials and maintain surface water quality conditions in adjacent receiving waters.

**IMPACT WQ-3**

Possible Temporary Effects on Groundwater or Surface Water Quality Resulting from Contact with the Water Table during Construction. Installation of relief wells, cutoff walls, and dewatering of the construction area and borrow sites (e.g., removing groundwater that may fill trenches dug for cutoff wall construction or initial dewatering of relief wells) could result in the release of contaminants to surface or groundwater. Therefore, this impact would be potentially significant throughout the project study area.

**c.i. Potential Significant Impact:** (North Sacramento Streams Levee Improvements)

Because dewatering of the construction area and direct construction of proposed project elements could have an adverse effect on groundwater or surface water quality, and because plans to prevent water quality degradation from dewatering are not part of the proposed project, these proposed project elements would have a potentially significant impact. Mitigation Measure WQ-3, described below, has been developed to address this impact.

**c.ii. Facts in Support of Finding:**

**Mitigation Measure WQ-3:** Obtain Appropriate Discharge and Dewatering Permit and Implement Provisions for Dewatering.

Before discharging any dewatered effluent to surface water, SAFCA shall obtain a Low Threat Discharge and Dewatering NPDES permit, or an Individual Permit from the Central Valley RWQCB if the dewatering is not covered under the RWQCB's NPDES Construction General Permit. The dewatering permit includes extensive water quality monitoring to adhere to the strict effluent and receiving water quality criteria outlined in the permit. As part of the permit, the permittee shall design and implement measures as necessary to meet the discharge limits identified in the relevant permit. For example, if dewatering is needed during the construction of a cutoff wall, the dewatering permit would require treatment or proper disposal of the water prior to discharge if it is contaminated. These measures shall be selected to achieve maximum sediment removal and represent the best available technology that is economically achievable.

Implemented measures could include the retention of dewatering effluent until particulate matter has settled before it is discharged, use of infiltration areas, and other BMPs. Final selection of water quality control measures would be subject to approval by the Central Valley RWQCB. SAFCA shall verify that coverage under the appropriate NPDES permit has been obtained before allowing dewatering activities to begin. SAFCA or its authorized agent shall perform routine inspections of the construction area to verify that the water quality control measures are properly implemented and maintained. SAFCA shall notify its contractors immediately if there is a non-compliance issue and shall require compliance.

**Timing:** Before the start of earthmoving activities.

**Responsibility:** Sacramento Area Flood Control Agency.

**Significance after Mitigation:** Implementation of Mitigation Measure WQ-3 would reduce the potential effects associated with the potential release of contaminants to surface or groundwater during construction to a **less-than-significant** level because implementation of dewatering provisions would decrease the potential for release of these contaminants, and would provide for cleanup should these releases occur.

**d.i. Potential Significant Impact:** (Natomas East Main Drainage Canal/Steelhead Creek Corridor Management Plan)

Direct construction or the need for construction dewatering related to the NEMDC/Steelhead Creek CMP could bring construction-related contaminants such as oil, grease, fuels, and other hazardous materials in contact with the water table. Because construction dewatering or direct construction activities could have an adverse effect on surface or groundwater quality, and because plans to prevent water quality degradation from dewatering are not part of the proposed project, this proposed project element would have a potentially significant impact. Mitigation Measure WQ-3, described below, has been developed to address this impact.

**d.ii. Facts in Support of Finding:**

**Mitigation Measure:** Implement Mitigation Measure WQ-3 (Obtain Appropriate Discharge and Dewatering Permit and Implement Provisions for Dewatering).

**Timing:** Before the start of earthmoving activities.

**Responsibility:** Sacramento Area Flood Control Agency.

**Significance after Mitigation:** Implementation of Mitigation Measure WQ-3 would reduce the potential effects associated with the potential release of contaminants to surface or groundwater during construction to a less-than-significant level because implementation of dewatering provisions would decrease the potential for release of these contaminants, and would provide for cleanup should these releases occur.

#### **D. Determination**

The Central Valley Water Board has determined that the Project, when implemented in accordance with the MMRP and the conditions in this Order, will not result in any significant adverse water quality or supply impacts. (California Code of Regulations, Title 14, section 15096, subd. (h).)

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### Copies of this Form

In order to identify your project, it is necessary to include a copy of the Project specific Cover Sheet below with your report: please retain for your records. If you need to obtain a copy of the Cover Sheet you may download a copy of this Order as follows:

1. Go to: [http://www.waterboards.ca.gov/water\\_issues/programs/cwa401/certifications.shtml](http://www.waterboards.ca.gov/water_issues/programs/cwa401/certifications.shtml)
2. Find your Order in the table based on Applicant, Date, and Subject headers.

### Report Submittal Instructions

1. Check the box on the Report and Notification Cover Sheet next to the report or notification you are submitting.
  - **Part A (Annual Report):** This report will be submitted annually from the anniversary of Project effective date until a Notice of Project Complete Letter is issued.
  - **Part B (Project Status Notifications):** Used to notify the Central Valley Water Board of the status of the Project schedule that may affect Project billing.
  - **Part C (Conditional Notifications and Reports):** Required on a case by case basis for accidental discharges of hazardous materials, violation of compliance with water quality standards, notification of in-water work, or other reports.
2. Sign the Report and Notification Cover Sheet and attach all information requested for the Report Type.
3. **Electronic Report Submittal Instructions:**
  - Submit signed Report and Notification Cover Sheet and required information via email to: [centralvalleyredding@waterboards.ca.gov](mailto:centralvalleyredding@waterboards.ca.gov) and cc: [Daniel.Warner@waterboards.ca.gov](mailto:Daniel.Warner@waterboards.ca.gov)
  - Include in the subject line of the email:  
Subject: ATTN: Daniel Warner; Reg. Measure ID: 407878 Report

### Definition of Reporting Terms

1. **Active Discharge Period:** The active discharge period begins with the effective date of this Order and ends on the date that the Permittee receives a Notice of Completion of Discharges Letter or, if no post-construction monitoring is required, a Notice of Project Complete Letter. The Active Discharge Period includes all elements of the Project including site construction and restoration, and any Permittee responsible compensatory mitigation construction.
2. **Request for Notice of Completion of Discharges Letter:** This request by the Permittee to the Central Valley Water Board staff pertains to projects that have post construction monitoring requirements, e.g. if site restoration was required to be monitored for 5 years following construction. Central Valley Water Board staff will review the request and send a Completion of Discharges Letter to the Permittee upon approval. This letter will initiate the post-discharge monitoring period and a change in fees from the annual

active discharge fee to the annual post-discharge monitoring fee.

3. **Request for Notice of Project Complete Letter:** This request by the Permittee to the Central Valley Water Board staff pertains to projects that either have completed post-construction monitoring and achieved performance standards or have no post-construction monitoring requirements, and no further Project activities are planned. Central Valley Water Board staff will review the request and send a Project Complete Letter to the Permittee upon approval. Termination of annual invoicing of fees will correspond with the date of this letter.
4. **Post-Discharge Monitoring Period:** The post-discharge monitoring period begins on the date of the Notice of Completion of Discharges Letter and ends on the date of the Notice of Project Complete Letter issued by the Central Valley Water Board staff. The Post-Discharge Monitoring Period includes continued water quality monitoring or compensatory mitigation monitoring.
5. **Effective Date:** Date of Order issuance.

### Map/Photo Documentation Information

When submitting maps or photos, please use the following formats.

1. **Map Format Information:**  
Preferred map formats of at least 1:24000 (1" = 2000') detail (listed in order of preference):
  - **GIS shapefiles:** The shapefiles must depict the boundaries of all project areas and extent of aquatic resources impacted. Each shape should be attributed with the extent/type of aquatic resources impacted. Features and boundaries should be accurate to within 33 feet (10 meters). Identify datum/projection used and if possible, provide map with a North American Datum of 1983 (NAD83) in the California Teale Albers projection in feet.
  - **Google KML files** saved from Google Maps: My Maps or Google Earth Pro. Maps must show the boundaries of all project areas and extent/type of aquatic resources impacted. Include URL(s) of maps. If this format is used include a spreadsheet with the object ID and attributed with the extent/type of aquatic resources impacted.
  - **Other electronic format** (CAD or illustration format) that provides a context for location (inclusion of landmarks, known structures, geographic coordinates, or USGS DRG or DOQQ). Maps must show the boundaries of all project areas and extent/type of aquatic resources impacted. If this format is used include a spreadsheet with the object ID and attributed with the extent/type of aquatic resources impacted.
  - Aquatic resource maps marked on paper **USGS 7.5 minute topographic maps** or **Digital Orthophoto Quarter Quads (DOQQ)** printouts. Maps must show the boundaries of all project areas and extent/type of aquatic resources impacted. If this format is used include a spreadsheet with the object ID and attributed with the extent/type of aquatic resources impacted.
2. **Photo-Documentation:** Include a unique identifier, date stamp, written description of photo details, and latitude/longitude (in decimal degrees) or map indicating location of photo. Successive photos should be taken from the same vantage point to compare pre/post construction conditions.

### REPORT AND NOTIFICATION COVER SHEET

**Project:** North Sacramento Streams Levee Accreditation Project  
**Permittee:** Sacramento Area Flood Control Agency  
**Reg. Meas. ID:** 407878 **Place ID:** 826575  
**Order Effective Date:** 5 July 2017  
**Order Expiration Date:** 5 July 2022

### Report Type Submitted

#### Part A – Project Reporting

Report Type 1 ☐ Monthly Report  
Report Type 2 ☐ Annual Report

#### Part B - Project Status Notifications

Report Type 3 ☐ Commencement of Construction  
Report Type 4 ☐ Request for Notice of Completion of Discharges Letter  
Report Type 5 ☐ Request for Notice of Project Complete Letter

#### Part C - Conditional Notifications and Reports

Report Type 6 ☐ Accidental Discharge of Hazardous Material Report  
Report Type 7 ☐ Violation of Compliance with Water Quality Standards Report  
Report Type 8 ☐ In-Water Work/Diversions Water Quality Monitoring Report  
Report Type 9 ☐ Modifications to Project Report  
Report Type 10 ☐ Transfer of Property Ownership Report  
Report Type 11 ☐ Transfer of Long-Term BMP Maintenance Report



"I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."

Print Name <sup>1</sup>

Affiliation and Job Title

Signature

Date

**<sup>1</sup>STATEMENT OF AUTHORIZATION (include if authorization has changed since application was submitted)**

I hereby authorize \_\_\_\_\_ to act in my behalf as my representative in the submittal of this report, and to furnish upon request, supplemental information in support of this submittal.

\_\_\_\_\_  
Permittee's Signature

\_\_\_\_\_  
Date

**\*This Report and Notification Cover Sheet must be signed by the Permittee or a duly authorized representative and included with all written submittals.**

## Part A – Project Reporting

<b>Report Type 1</b>	<b>Monthly Report – Not Applicable</b>
<b>Report Purpose</b>	Notifies Central Valley Water Board staff of the Project status and environmental compliance activities on a monthly basis.
<b>When to Submit</b>	On the 1st day of each month until a Notice of Project Complete Letter is issued to the Permittee.
<b>Report Contents</b>	<ol style="list-style-type: none"> <li><b>1. Construction Summary</b> Describe Project progress and schedule including initial ground disturbance, site clearing and grubbing, road construction, site construction, and the implementation status of construction storm water Best Management Practices (BMPs<sup>9</sup>). If construction has not started, provide estimated start date.</li> <li><b>2. Event Summary</b> Describe distinct Project activities and occurrences, including environmental monitoring, surveys, and inspections.</li> <li><b>3. Photo Summary</b> Provide photos of Project activities. For each photo, include a unique site identifier, date stamp, written description of photo details, and latitude/longitude (in decimal degrees) or map indicating location of photo. Successive photos should be taken from the same vantage point to compare pre/post construction conditions.</li> <li><b>4. Compliance Summary</b> <ol style="list-style-type: none"> <li>a) List name and organization of environmental surveyors, monitors, and inspectors involved with monitoring environmental compliance for the reporting period.</li> <li>b) List associated monitoring reports for the reporting period.</li> <li>c) Summarize observed incidences of non-compliance, compliance issues, minor problems, or occurrences.</li> <li>d) Describe each observed incidence in detail. List monitor name and organization, date, location, type of incident, corrective action taken (if any), status, and resolution.</li> </ol> </li> </ol>

<sup>9</sup> Best Management Practices (BMPs) is a term used to describe a type of water pollution or environmental control.

<b>Report Type 2</b>	<b>Annual Report</b>
<b>Report Purpose</b>	Notify the Central Valley Water Board staff of Project status during both the active discharge and post-discharge monitoring periods.
<b>When to Submit</b>	Annual reports shall be submitted each year on the 1st day of August. Annual reports shall continue until a Notice of Project Complete Letter is issued to the Permittee.
<b>Report Contents</b>	<p>The contents of the annual report shall include the topics indicated below for each project period. Report contents are outlined in Annual Report Topics below.</p> <p><b><u>During the Active Discharge Period</u></b></p> <ul style="list-style-type: none"> <li>• <b>Topic 1: Construction Summary</b></li> <li>• <b>Topic 2: Mitigation for Temporary Impacts Status</b></li> <li>• <b>Topic 3: Compensatory Mitigation for Permanent Impacts Status</b></li> </ul> <p><b><u>During the Post-Discharge Monitoring Period</u></b></p> <ul style="list-style-type: none"> <li>• <b>Topic 2: Mitigation for Temporary Impacts Status</b></li> <li>• <b>Topic 3: Compensatory Mitigation for Permanent Impacts Status</b></li> </ul>
<b>Annual Report Topics (1-3)</b>	
<b>Annual Report Topic 1</b>	<b>Construction Summary</b>
<b>When to Submit</b>	With the annual report during the Active Discharge Period.
<b>Report Contents</b>	<ol style="list-style-type: none"> <li>1. Project progress and schedule including initial ground disturbance, site clearing and grubbing, road construction, site construction, and the implementation status of construction storm water best management practices (BMPs). If construction has not started, provide estimated start date and reasons for delay.</li> <li>2. Map showing general Project progress.</li> <li>3. If applicable: <ol style="list-style-type: none"> <li>a. Summary of Conditional Notification and Report Types 6 and 7 (Part C below).</li> <li>b. Summary of Certification Deviations. See Certification Deviation Attachment for further information.</li> </ol> </li> </ol>
<b>Annual Report Topic 2</b>	<b>Mitigation for Temporary Impacts Status</b>
<b>When to Submit</b>	With the annual report during both the Active Discharge Period and Post-Discharge Monitoring Period.
<b>Report Contents</b>	<ol style="list-style-type: none"> <li>1. Planned date of initiation and map showing locations of mitigation for temporary impacts to waters of the state and all upland areas of temporary disturbance which could result in a discharge to waters of the state.</li> <li>2. If mitigation for temporary impacts has already commenced, provide a map and information concerning attainment of performance standards contained in the restoration plan.</li> </ol>
<b>Annual Report Topic 3</b>	<b>Compensatory Mitigation for Permanent Impacts Status</b>

<b>When to Submit</b>	With the annual report during both the Active Discharge Period and Post-Discharge Monitoring Period.
<b>Report Contents</b>	<p><b>*If not applicable report N/A.</b></p> <p><b>Part A. Permittee Responsible</b></p> <ol style="list-style-type: none"><li>1. Planned date of initiation of compensatory mitigation site installation.</li><li>2. If installation is in progress, a map of what has been completed to date.</li><li>3. If the compensatory mitigation site has been installed, provide a final map and information concerning attainment of performance standards contained in the compensatory mitigation plan.</li></ol> <p><b>Part B. Mitigation Bank or In-Lieu Fee</b></p> <ol style="list-style-type: none"><li>1. Status or proof of purchase of credit types and quantities.</li><li>2. Include the name of bank/ILF Program and contact information.</li><li>3. If ILF, location of project and type if known.</li></ol>

## Part B – Project Status Notifications

<b>Report Type 3</b>	<b>Commencement of Construction</b>
<b>Report Purpose</b>	Notify Central Valley Water Board staff prior to the start of construction.
<b>When to Submit</b>	Must be received at least seven (7) days prior to start of initial ground disturbance activities.
<b>Report Contents</b>	<ol style="list-style-type: none"> <li>1. Date of commencement of construction.</li> <li>2. Anticipated date when discharges to waters of the state will occur.</li> <li>3. Project schedule milestones including a schedule for onsite compensatory mitigation, if applicable.</li> <li>4. Construction Storm Water General Permit WDID No.</li> </ol>
<b>Report Type 4</b>	<b>Request for Notice of Completion of Discharges Letter</b>
<b>Report Purpose</b>	Notify Central Valley Water Board staff that post-construction monitoring is required and that active Project construction, including any mitigation and permittee responsible compensatory mitigation, is complete.
<b>When to Submit</b>	Must be received by Central Valley Water Board staff within thirty (30) days following completion of all Project construction activities.
<b>Report Contents</b>	<ol style="list-style-type: none"> <li>1. Status of storm water Notice of Termination(s), if applicable.</li> <li>2. Status of post-construction storm water BMP installation.</li> <li>3. Pre- and post-photo documentation of all Project activity sites where the discharge of dredge and/or fill/excavation was authorized.</li> <li>4. Summary of Certification Deviation discharge quantities compared to initial authorized impacts to waters of the state, if applicable.</li> <li>5. An updated monitoring schedule for mitigation for temporary impacts to waters of the state and permittee responsible compensatory mitigation during the post-discharge monitoring period, if applicable.</li> </ol>
<b>Report Type 5</b>	<b>Request for Notice of Project Complete Letter</b>
<b>Report Purpose</b>	Notify Central Valley Water Board staff that construction and/or any post-construction monitoring is complete, or is not required, and no further Project activity is planned.
<b>When to Submit</b>	Must be received by Central Valley Water Board staff within thirty (30) days following completion of all Project activities.
<b>Report Contents</b>	<b>Part A: Mitigation for Temporary Impacts</b> <ol style="list-style-type: none"> <li>1. A report establishing that the performance standards outlined in the restoration plan have been met for Project site upland areas of temporary disturbance which could result in a discharge to waters of the state.</li> <li>2. A report establishing that the performance standards outlined in the restoration plan have been met for restored areas of temporary impacts to waters of the state. Pre- and post-photo documentation of all restoration sites.</li> </ol>

	<p><b>Part B: Permittee Responsible Compensatory Mitigation</b></p> <ol style="list-style-type: none"><li>1. A report establishing that the performance standards outlined in the compensatory mitigation plan have been met.</li><li>2. Status on the implementation of the long-term maintenance and management plan and funding of endowment.</li><li>3. Pre- and post-photo documentation of all compensatory mitigation sites.</li><li>4. Final maps of all compensatory mitigation areas (including buffers).</li></ol> <p><b>Part C: Post-Construction Storm Water BMPs</b></p> <ol style="list-style-type: none"><li>1. Date of storm water Notice of Termination(s), if applicable.</li><li>2. Report status and functionality of all post-construction BMPs.</li></ol>
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## Part C – Conditional Notifications and Reports

<b>Report Type 6</b>	<b>Accidental Discharge of Hazardous Material Report</b>
<b>Report Purpose</b>	Notifies Central Valley Water Board staff that an accidental discharge of hazardous material has occurred.
<b>When to Submit</b>	Within five (5) working days following the date of an accidental discharge. Continue reporting as required by Central Valley Water Board staff.
<b>Report Contents</b>	<ol style="list-style-type: none"> <li>1. The report shall include the OES Incident/Assessment Form, a full description and map of the accidental discharge incident (i.e. location, time and date, source, discharge constituent and quantity, aerial extent, and photo documentation). If applicable, the OES Written Follow-Up Report may be substituted.</li> <li>2. If applicable, any required sampling data, a full description of the sampling methods including frequency/dates and times of sampling, equipment, locations of sampling sites.</li> <li>3. Locations and construction specifications of any barriers, including silt curtains or diverting structures, and any associated trenching or anchoring.</li> </ol>

<b>Report Type 7</b>	<b>Violation of Compliance with Water Quality Standards Report</b>
<b>Report Purpose</b>	Notifies Central Valley Water Board staff that a violation of compliance with water quality standards has occurred.
<b>When to Submit</b>	The Permittee shall report any event that causes a violation of water quality standards within three (3) working days of the noncompliance event notification to Central Valley Water Board staff.
<b>Report Contents</b>	The report shall include: the cause; the location shown on a map; and the period of the noncompliance including exact dates and times. If the noncompliance has not been corrected, include: the anticipated time it is expected to continue; the steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance; and any monitoring results if required by Central Valley Water Board staff.

<b>Report Type 8</b>	<b>In-Water Work and Diversions Water Quality Monitoring Report</b>
<b>Report Purpose</b>	Notifies Central Valley Water Board staff of the start and completion of in-water work. Reports the sampling results during in-water work and during the entire duration of temporary surface water diversions.
<b>When to Submit</b>	Seven (7) days prior to the start of in-water work. Within three (3) working days following the completion of in-water work. Surface water monitoring reports to be submitted two (2) weeks on initiation of in-water construction and during entire duration of temporary surface water diversions. Continue reporting in accordance with the approved water quality monitoring plan or as indicated in XIII.C.3.
<b>Report Contents</b>	As required by the approved water quality monitoring plan or as indicated in XIII.C.3.

<b>Report Type 9</b>	<b>Modifications to Project Report</b>
<b>Report Purpose</b>	Notifies Central Valley Water Board staff if the Project, as described in the application materials, is altered in any way or by the imposition of subsequent permit conditions by any local, state or federal regulatory authority.
<b>When to Submit</b>	If Project implementation as described in the application materials is altered in any way or by the imposition of subsequent permit conditions by any local, state or federal regulatory authority.
<b>Report Contents</b>	A description and location of any alterations to Project implementation. Identification of any Project modifications that will interfere with the Permittee's compliance with the Order.

<b>Report Type 10</b>	<b>Transfer of Property Ownership Report</b>
<b>Report Purpose</b>	Notifies Central Valley Water Board staff of change in ownership of the Project or Permittee-responsible mitigation area.
<b>When to Submit</b>	At least 10 working days prior to the transfer of ownership.
<b>Report Contents</b>	<ol style="list-style-type: none"> <li>1. A statement that the Permittee has provided the purchaser with a copy of this Order and that the purchaser understands and accepts: <ol style="list-style-type: none"> <li>a. the Order's requirements and the obligation to implement them or be subject to administrative and/or civil liability for failure to do so; and</li> <li>b. responsibility for compliance with any long-term BMP<sup>10</sup> maintenance plan requirements in this Order.</li> </ol> </li> <li>2. A statement that the Permittee has informed the purchaser to submit a written request to the Central Valley Water Board to be named as the permittee in a revised order.</li> </ol>

<b>Report Type 11</b>	<b>Transfer of Long-Term BMP Maintenance Report</b>
<b>Report Purpose</b>	Notifies Central Valley Water Board staff of transfer of long-term BMP maintenance responsibility.
<b>When to Submit</b>	At least 10 working days prior to the transfer of BMP maintenance responsibility.
<b>Report Contents</b>	A copy of the legal document transferring maintenance responsibility of post-construction BMPs.

<sup>10</sup> Best Management Practices (BMPs) is a term used to describe a type of water pollution or environmental control.



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### SIGNATORY REQUIREMENTS

*All Documents Submitted In Compliance With This Order  
Shall Meet The Following Signatory Requirements:*

1. All applications, reports, or information submitted to the Central Valley Water Quality Control Board (Central Valley Water Board) must be signed and certified as follows:
  - a) For a corporation, by a responsible corporate officer of at least the level of vice-president.
  - b) For a partnership or sole proprietorship, by a general partner or proprietor, respectively.
  - c) For a municipality, or a state, federal, or other public agency, by either a principal executive officer or ranking elected official.
2. A duly authorized representative of a person designated in items 1.a through 1.c above may sign documents if:
  - a) The authorization is made in writing by a person described in items 1.a through 1.c above.
  - b) The authorization specifies either an individual or position having responsibility for the overall operation of the regulated activity.
  - c) The written authorization is submitted to the Central Valley Water Board Staff Contact prior to submitting any documents listed in item 1 above.
3. Any person signing a document under this section shall make the following certification:

"I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."

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## **Certification Deviation Procedures**

### **Introduction**

These procedures are put into place to preclude the need for Order amendments for minor changes in the Project routing or location. Minor changes or modifications in project activities are often required by the Permittee following start of construction. These deviations may potentially increase or decrease impacts to waters of the state. In such cases, a Certification Deviation, as defined in Section XIII.L of the Order, may be requested by the Permittee as set forth below:

### **Process Steps**

Who may apply: The Permittee or the Permittee's duly authorized representative or agent (hereinafter, "Permittee") for this Order.

How to apply: By letter or email to the 401 staff designated as the contact for this Order.

Certification Deviation Request: The Permittee will request verification from the Central Valley Water Board staff that the project change qualifies as a Certification Deviation, as opposed to requiring an amendment to the Order. The request should:

1. Describe the Project change or modification:
  - a. Proposed activity description and purpose;
  - b. Why the proposed activity is considered minor in terms of impacts to waters of the state;
  - c. How the Project activity is currently addressed in the Order; and,
  - d. Why a Certification Deviation is necessary for the Project.
2. Describe location (latitude/longitude coordinates), the date(s) it will occur, as well as associated impact information (i.e., temporary or permanent, federal or non-federal jurisdiction, water body name/type, estimated impact area, etc.) and minimization measures to be implemented.
3. Provide all updated environmental survey information for the new impact area.
4. Provide a map that includes the activity boundaries with photos of the site.
5. Provide verification of any mitigation needed according to the Order conditions.
6. Provide any other information required by Central Valley Water Board staff to determine whether the Project change or modification necessitates additional environmental review. (California Code Regulations, Title 14, Sections 15061, 15162-15164.)

Post-Discharge Certification Deviation Reporting:

1. Within 30 calendar days of completing the approved Certification Deviation activity, the Permittee will provide a post-discharge activity report that includes the following information:
  - a. Activity description and purpose;
  - b. Activity location, start date, and completion date;
  - c. Erosion control and pollution prevention measures applied;
  - d. The net change in impact area by water body type(s) in acres, linear feet and cubic yards;
  - e. Mitigation plan, if applicable; and,
  - f. Map of activity location and boundaries; post-construction photos.

Annual Summary Deviation Report:

1. Until a Notice of Completion of Discharges Letter or Notice of Project Complete Letter is issued, include in the Annual Project Report (see Construction Notification and Reporting attachment) a compilation of all Certification Deviation activities through the reporting period with the following information:
  - a. Site name(s).
  - b. Date(s) of Certification Deviation approval.
  - c. Location(s) of authorized activities.
  - d. Impact area(s) by water body type prior to activity in acres, linear feet and cubic yards, as originally authorized in the Order.
  - e. Actual impact area(s) by water body type in, acres, linear feet and cubic yards; due to Certification Deviation activity(ies).
  - f. The net change in impact area by water body type(s) in acres, linear feet and cubic yards;
  - g. Mitigation to be provided (approved mitigation ratio and amount).